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ABSTRACT

Intended for use in Florida training programs for caregivers of infants and toddlers with disabilities, this guide presents an overview of the Model of Interdisciplinary Training for Children with Handicaps (MITCH); offers a user's guide to the series; and provides specific information for presenting Module 12, which focuses on visual impairments. After the introduction to the MITCH program as a whole, the user's guide provides information on the instructor's role, the 3-hour training session, the use of videotapes and audiotapes, and follow-up activities. For this module, goals and objectives focus on providing an understanding of the functions of the visual system; relevant terminology; orientation and mobility; signs of visual disorders; effects of visual impairment on cognitive and language development, motor development, self-help skills, and social emotional development; and adaptation of the caregiving environment. For each hour of training, a script, suggested activities, and relevant handouts are provided. Attached are lists of recommended resources and references, reproducible forms and handouts, and forms for the 6-week follow up. Also attached is an overview of normal child development from birth to 36 months in the areas of personal and social skills, language and understanding skills, small muscle skills, and large muscle skills. (DB)

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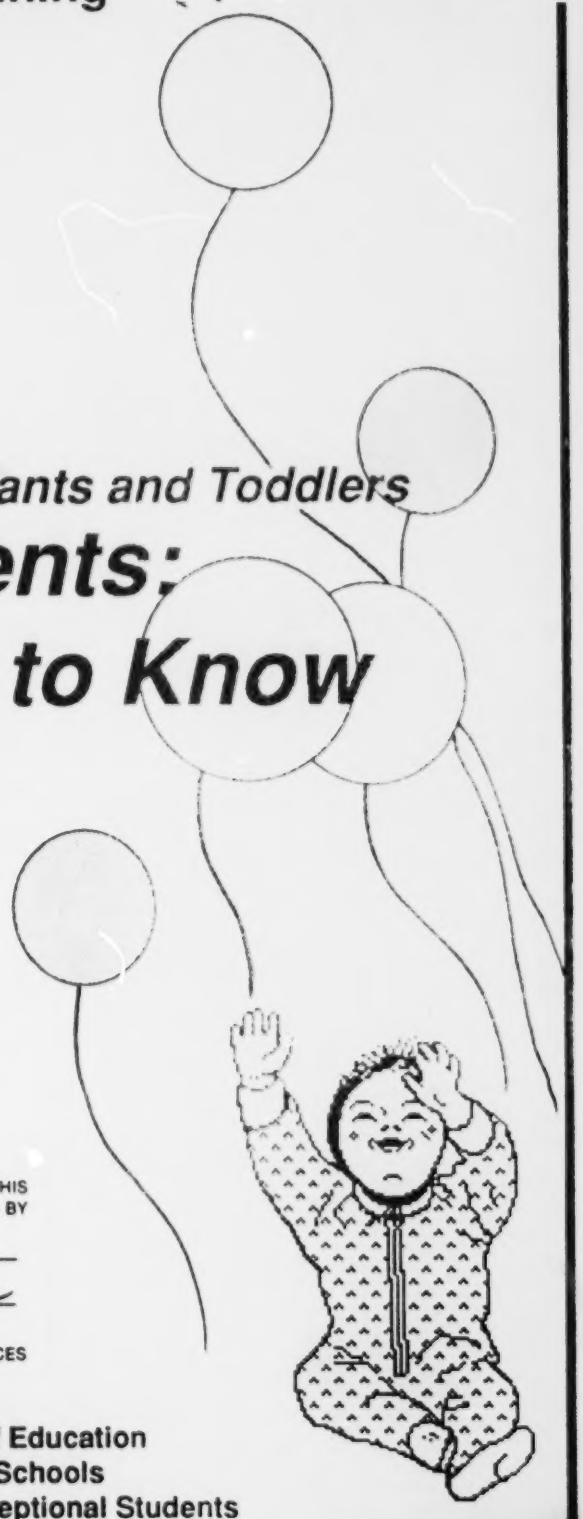
MITCH Module 12

Model of Interdisciplinary Training for Children with Handicaps



A Series for Caregivers of Infants and Toddlers

Visual Impairments: What You Need to Know

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MITCH Module 12

Model of Interdisciplinary Training for Children with Handicaps

A Series for Caregivers of Infants and Toddlers

Visual Impairments: What You Need to Know

Florida Department of Education
Division of Public Schools
Bureau of Education for Exceptional Students
1991

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1991

MITCH Module 12

Model of Interdisciplinary Training for Children with Handicaps

A Series for Caregivers of Infants and Toddlers

Visual Impairments: What You Need to Know

Alan R. Morse, J.D. Ph.D.
Executive Vice President
The Jewish Guild for the Blind
New York, New York

Ellen Trief, Ed.D.
Director of Early Intervention
The Jewish Guild for the Blind
New York, New York

L. Penny Rosenblum, M.Ed.
Teacher of the Visually Impaired
Charleston County School District
Charleston, South Carolina

Cathy Keller, M.S.
Supervisor in Early Intervention
The Jewish Guild for the Blind
New York, New York

Dade County School Board

Mr. William H. Turner, Chairperson

Ms. Janet R. McAliley, Vice-Chairperson

Mr. G. Holmes Braddock

Dr. Rosa Castro Feinberg

Ms. Betsy Kaplan

Dr. Michael Krop

Mr. Robert Renick

Project MITCH Staff

Carole Fox Abbott, Ph.D.
MITCH Project Specialist
FDLRS/South - Miami

Diana M. Fernandez
MITCH Project Assistant
FDLRS/South - Miami

Tanya Nuñez
MITCH Project Assistant
FDLRS/South - Miami

Project MITCH Advisory Board

Host Agencies

Mary Anne Brost
Project Director
FDLRS/Gateway - Jasper

Dr. Susan Gold
Adjunct Assistant Professor
Mailman Center - Miami

Terri Kanov
Executive Director, Division of
Exceptional Student Education
Dade County Public Schools - Miami

Dr. Eleanor L. Levine
Supervisor
FDLRS/South - Miami

Dr. Keith Scott
Project Director
FDLRS/Mailman - Miami

Dr. Mary Theresa Urbano
Director of Nursing
Mailman Center - Miami

Other

Dr. Mimi Graham
Adjunct Assistant Professor
Florida State University - Tallahassee

Lois Klezmer
Coordinator, Early Childhood Education and
Sim Lesser
Assistant Professor, Early Childhood Education
Miami Dade Community College - Miami

Linda Machado
Parent Advocate
Chairperson, State Advisory Council on
Exceptional Student Education - Miami

Dr. Joyce McCalla
Director
Metro Dade Child Development Services -
Miami

William Osterhoudt
Director
Exceptional Student Education
Monroe County Public Schools -
Key West

Elizabeth P. Ridgley
Director, Pinecrest Presbyterian
Preschool - Miami

Dr. Sharon Vaughn
Associate Professor of Education
University of Miami - Miami

Sondra Wallace
Director of Education
Head Start - Miami

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In addition to the MITCH Advisory Board members, special thanks are given to the following:

The Bureau of Education for Exceptional Students (BEES) Editorial Commitee:

Doris B. Nabi
Administrator
Program Services

Ruth S. Jones, Ph.D.
Supervisor
Program Services

Carol Allman
Program Specialist
Programs for the Visually Impaired
Program Development

Arlene Duncan
Program Specialist
Clearinghouse./Information Services
Program Services

Elizabeth Devore, D.C.
Program Specialist
Prekindergarten Handicapped Program

Suzy Fay
Program Specialist
Publications
Program Services

Critical readers and persons who piloted, reviewed, and tested this module:

Roni Bader Tables
Supervisor, Pre-K Program
Dade County Public Schools - Miami

Milagros Callejas
Homebound Teacher of Visually Impaired Infants
Dade County Public Schools - Miami

Suzanne E. Dalton
Supervisor
Florida Instructional Materials Center/Visually Handicapped
Hillborough County Public Schools - Tampa

Kay Alicyn Ferrell, Ph.D.
Professor
Teachers College, Columbia University
Teacher Preparation for Teachers of the Visually Impaired - New York, NY

Susan Gold, Ed.D.
Adjunct Assistant Professor
Mailman Center for Child Development
University of Miami - Miami

Jan Lichtenstein
Coordinator of Programs for the Visually Impaired
Charleston County Schools - Charleston, SC

Dolores Mendoza
Parent Trainer, Pre-K Program
Dade County Public Schools - Miami

Marilyn Robinson
Prekindergarten Placement Specialist
Dade County Public Schools - Miami

Judy Simmons
Project Manager
Hillsborough County Head Start - Tampa

Critical readers and persons who piloted, reviewed, and tested this module: (cont'd)

Fareed Haj, Ph.D.
Educational Specialist
FDLRS/South
Dade County Public Schools - Miami

Karin P. Stumwasser, Ed.D.
Consultant
The Jewish Guild for the Blind -
New York, NY

Other contributors

Lisa A. Rozpad, Program Specialist for desktop publishing, Mailman Center for Child Development - Miami

Ellen White, for design and production of handouts, FDLRS/South -Miami

Tanya Nuñez and Carole Abbott for graphics, FDLRS/South - Miami

TABLE OF CONTENTS

	Page
Introduction	1
Project MITCH Overview	1
MITCH Modules	2
MITCH Booklets	3
User's Guide to Series	5
Instructor	5
Instructor Qualifications	5
Role of Instructor	5
Instructor Preparation and Follow-Through	6
The Session	7
Time	7
Handouts/Overheads	7
Videotapes	8
Audiotapes	8
MITCH Theme Music	9
Attendance	9
Six-Week Follow-Up Activity	9
Certificate of Completion	9
Record of Completion	9
Specific Information for Presenting Module 12	11
Goals and Objectives	11
Other Recommended Instructors	12
Contact List	12
Equipment, Materials, and Supplies	13
Equipment	13
Supplies	13
Materials Contained in This Manual	13
Videotape	13
Materials Not Contained in This Manual	13
Hour 1	
Goals and Objectives	33
Content	34
Hour 2	
Goals and Objectives	55
Content	56
Hour 3	
Goals and Objectives	77
Content	78
Resource List	95
References	99
Appendices	
A. Reproducible Forms for Three-Hour Module	
B. Reproducible Copies of Handouts/ Overheads/Booklets	
C. Reproducible Forms for the Six-Week Follow-Up Activity	

Introduction

Information in the Introduction should be reviewed by each instructor or user of this material. The Users Guide to Series begins on page 5. Information relating to this module begins on page 11.

PROJECT MITCH OVERVIEW

The purpose of the Project MITCH (Model of Interdisciplinary Training for Children with Handicaps) training series is to assist local school districts in Florida in providing interdisciplinary training and resources to parents, non-degreed daycare workers, and healthcare providers who work with special needs infants and toddlers ages 0-5, with emphasis on ages 0-2.

This series was funded by a grant to the Florida Diagnostic and Learning Resources System/South (FDLRS/South), on behalf of the FDLRS Network, from the Florida Department of Education, Bureau of Education for Exceptional Students (BEES).

In 1987, the Florida Legislature designated $100,000.00 of the total appropriation for the FDLRS Network to "expand services to infants and preschool children." The application submitted by Dade County on behalf of the FDLRS/South Associate Center serving Dade and Monroe Counties was selected for funding and was initiated on May 25, 1988. FDLRS/South collaborated with FDLRS/Mailman at the University of Miami and FDLRS/Gateway, serving Hamilton, Columbia, Lafayette, Madison and Suwannee Counties, to complete the work under the grant. Outcomes of the project include:

- assessment of the status of training and resources for the designated population
- design of a collaborative implementation and training model to include development of competencies, replicable training modules which enhance or expand the HRS eight-hour special needs child care module, an adapted training plan for daycare providers, recommendations for curricula to be used in daycare and preschool programs, and recommendations for provision of consultation to parents
- validation of the training modules in Dade, Monroe, and counties served by FDLRS/Gateway
- provision of training for potential instructors and other interested personnel in the 18 FDLRS Associate Center service regions.

Topics for the original eleven training modules, as well as information which provided the basis for the competencies, policy framework, and other products of Project MITCH, were obtained from a literature search, interviews, and letters of inquiry and needs assessments sent to over 600 persons throughout the State of Florida. The modules were written by several authors from various disciplines, including early childhood education, exceptional student education, nursing, occupational and physical therapy, speech and language, nutrition, and social work. Each module was read by several critical readers and was piloted in both north and south Florida at least three times before final rewriting took place.

The training series emphasizes developmentally appropriate practice and normal development as the means for working with youngsters who have special needs. The thirteen three-hour modules that currently make up the series have relevance for caregivers of normally developing children as well as caregivers who may be working with children who are handicapped, experiencing delays, or who may be at-risk. Although several of the modules specifically address normal and abnormal development from birth to 36 months of age, the material is also meaningful to caregivers of preschoolers who are chronologically older but who are functioning developmentally within the birth to three year range.

MITCH MODULES

Thirteen MITCH training modules have been developed.

(1) *Intellectual Development: What You Can Do to Help*

(2) *Speech and Language Development: What You Can Do to Help*

(3) *The Child Who Seems Different: Meeting Special Needs*

(4) *Family Functioning: The Impact of a Child with Special Needs*

(5) *Listening and Sensory Integration: What to Do Before Speech and Language Develop*

(6) *The Caregiving Environment: Planning an Effective Program*

(7) *Behavior Management: Preventing and Dealing with Problem Behavior*

(8) *Health Care: Infection Control, Medication Administration, and Seizure Management*

(9) *Motor Development: What You Need to Know*

(10) *Nutrition and Feeding Practices: What You Need to Know*

(11) *Working Together: Communication Skills for Parents, Caregivers, and Other Professionals.*

(12) *Visual Impairments: What You Need to Know*

(13) *Children of Substance Abusing Parents: What You Need to Know*

Each of the three-hour modules can be used independently. Although the modules are numbered sequentially, they may be presented in any order since no module provides prerequisite material for another. Each module contains a script for the instructor, activities, references, resource list, and reproducible handouts/overheads. In some cases, a videotape and/or an audiotape and other materials are available to supplement the written material.

MITCH BOOKLETS

Three booklets have also been produced through MITCH. These may be used with modules as indicated or may be used independently. The booklets are listed below:

- *A Simple Introduction to Physical and Health Impairments*, to be used with Module 3
- *Welcome to the World: An Overview of Your Growing Child*, to be used with Modules 1, 2, 3, 6, and 7
- *Curricula for Use with High Risk and Handicapped Infants and Toddlers*, for use as a supplement to the modules.

User's Guide to Series

INSTRUCTOR

Instructor Qualifications

Unless otherwise stated, the MITCH modules are designed to be presented by qualified and credentialed instructors in fields such as early childhood special education, early childhood education, special education, child development, psychology and nursing.

Role of Instructor

Although the modules do contain scripts, the instructor is encouraged to add to them with his own style, personality, anecdotes, information, handouts, references and resources. It is expected that the instructor will exercise judgement in tailoring the material to the needs, interests, and level of the participants. The best presentations will be those that are specifically designed for the participants by the instructor who best knows their needs.

The instructor may change the lecture/discussion and activity ratio depending upon the group's needs. If all modules are being scheduled for presentation within a relatively short period of time for the same group of participants, the instructor may choose among the activities in order to offer variety since several modules share similar types of activities. The instructor will need to plan adequate time in order to become familiar with the material and tailor it to the needs of each specific audience.

A successful presentation of the material is heavily reliant upon an enthusiastic style on the part of the instructor. Suggestions for achieving this include:

- allow for introductions of participants
- accept and acknowledge interaction from all
- paraphrase questions and responses from the participants loudly enough for all to hear
- create a comfortable atmosphere
- summarize the content of each session before closing.

The audience may include a broad range of persons, including those who knowingly work with very young children with special needs, to others who may have children under their care who have special needs that are not yet recognized. The instructor should assist all caregivers in becoming more comfortable with:

- recognizing indicators that a child may be at-risk or may have special needs
- working with that child
- getting additional support and assistance regarding such a child.

It will be important to emphasize that all children are more like one another than they are different. Keeping children in the most natural or normal environment is a major goal for caregivers.

Instructor Preparation and Follow-Through

Prior to presenting any of the thirteen three-hour modules, we recommend that each instructor:

- become entirely familiar with the content and format of presentation
- preview any videotape and/or audiotape
- set date for training
- arrange for a comfortable room in which to present the training
- advertise training in a timely fashion (see reproducible flier in Appendix A)
- arrange for the use of an audiocassette player, VHS videocassette recorder, overhead projector and screen, as needed
- photocopy all handouts and the List of Participants
- prepare overhead transparencies and/or other materials
- collect any additional materials not provided in this packet (see materials list)

After presenting any of the eleven three-hour modules, the instructor should:

- photocopy the reminder letter for each participant regarding the return of the Six-Week Follow-Up Activity
- mail the reminder letters three to four weeks after presenting the training module
- collect, or have participants mail, the completed Six-Week Follow-Up Activity
- review completed Six-Week Follow-Up Activity for each participant
- photocopy Certificate of Completion
- complete Certificate of Completion
- deliver or mail Certificates of Completion to each participant who successfully completed the Six-Week Follow-Up Activity

- maintain a complete record of persons who have successfully completed the module, using the List of Participants.

Reproducible copies of the Instructor's Time Table, Advertising Flier, List of Participants, Mailer, and Certificate of Completion are in Appendix A.

THE SESSION

Time

This module, if presented as written, is three hours in length. It may be presented in a single three-hour session, with a 15-minute break after one-and-three-quarter hours, or in three one-hour sessions.

Each module contains a five minute time allotment for opening each hour session, and a five minute time allotment for closing each hour session. If a module is being presented in one three-hour session, the instructor should eliminate the closing time allotment from hour one and the opening time allotment for both hours two and three in order to gain 15 minutes to use for the break. The 15-minute break should occur between presentation of the second and third hours of the module.

It is important to start and end each session on time. Estimates of presentation time are written in the left hand margins for specific segments or activities within each hour. However, the instructor may choose to expand on one or more of these segments or activities while shortening others.

Remember that a limited amount of information that is thoroughly presented will be more meaningful for participants than a larger quantity of information that has been inadequately understood by the participants.

Handouts/Overheads

Each training module comes complete with specially designed handouts. Since the modules complement one another, some handouts and booklets are recommended for use with more than one module. Reproducible originals of these materials are included in each of the appropriate modules. The Curricula booklet is available separately. The instructor should monitor and make decisions regarding reproduction and distribution of all handouts. The instructor also should supplement them with others that are appropriate.

When deciding which of the original handouts to reproduce as overhead transparencies, the instructor should choose only those with print large enough to be seen and easily read when projected on a screen. Many of the originals are not suited for use as overhead transparencies.

It is suggested, in a time saving effort, that all handouts be compiled into a single packet and distributed at the beginning of the first hour if the entire three-hour module is being presented, or at the beginning of each one-hour session if the module is being presented in one-hour segments. Only the handouts that will be discussed during the presentation should be reproduced and handed out. Some of the handouts present main points but are designed so that participants can use them for note taking. This should be called to the attention of the participants when appropriate.

MITCH printed materials may be reproduced and used in a manner that best meets the needs of the participants. Reproducible originals of handouts, overheads, and booklets (excluding the Curricula booklet) are in Appendix B of each module.

Videotapes

Videotapes have been chosen to supplement the material of several of the modules (Modules 1, 2, 3, 4, 6, 7, 8, and 9). All of the tapes will provide valuable information for the instructor, even if the videotape is not used during presentation of the three-hour module. Therefore, it is important for the instructor to view the tape that is associated with a specific module prior to presenting the module.

The videotapes have not been included in the designated time allotments suggested in each of the module manuals. The instructor may wish to substitute all or a part of a videotape for material written in the module, extend the three-hour time period, show the videotape at another session, or leave the videotape with the participants to watch as follow-up. See the Specific Information section of each module regarding the videotape for that module. Videotapes may not be copied without written consent of the producer. Information for obtaining videotapes is also provided in the Specific Information section.

Audiotapes

Audiotapes are recommended for the presentation of Modules 5 and 7. See the Specific Information section of each of those modules regarding the audiotapes. The audiotape presentations have been built into the designated time allotments suggested in each of the module manuals.

MITCH Theme Music

Included on the reverse side of the two audiotapes, one each in Module 5 and Module 7, is a three-minute segment of the MITCH theme music. The instructor may wish to play this as participants enter the session, as a signal to return from the break or in any other suitable manner.

Attendance

At the opening session of each three-hour module, participants should sign the List of Participants form (see Appendix A). The instructor should use this form to verify attendance for all three hours of training and completion of the Six Week Follow-Up Activity.

Six-Week Follow-Up Activity

Three to four weeks after presenting the training module, the instructor, or another person representing the training agency, should contact all participants to remind them to submit their final Six-Week Follow-Up Activity (see Appendix C). This may be done by phone or by mail using the prepared mailer (see Appendix A).

The instructor, or some other qualified person designated by the instructor, should evaluate the quality and content of the performance of the Six-Week Follow-Up Activity by each participant. This may be done by a visit to each participant's place of work or by having each participant mail the completed follow-up activity form to the instructor. The instructor will prepare and give a Certificate of Completion to every participant whose performance meets the instructor's criteria.

Certificate of Completion

Only those participants who attend all three hours of training and who successfully complete the Six-Week Follow-Up Activity are eligible to receive a Certificate of Completion (see Appendix A).

Record of Completion

The instructor should keep the completed List of Participants forms on file in the training agency. Information should be retrievable by the participant's name.

Specific Information for Presenting Module 12

GOALS AND OBJECTIVES

Goal for Hour 1: Participants will gain knowledge of the function of the visual system and common visual disorders.

Objective - Participants will gain an understanding of:

- function of the visual system
- terminology used to describe visual impairments
- concept of orientation and mobility
- visual disorders
- signs of visual disorders.

Goal for Hour 2: Participants will gain knowledge of how a visual impairment affects the development of the infant from birth to one year.

Objective - Participants will gain an understanding of:

- effects of a visual impairment on cognitive and language development of infants
- effects of a visual impairment on motor development of infants
- effects of a visual impairment on development of infants' self-help skills
- effects of a visual impairment on social-emotional development of infants

Goal for Hour 3: Participants wil gain knowledge of how a visual impairment affects the development of the toddler from 12 to 36 months.

Objective - Participants will gain an understanding of:

- effects of a visual impairment on cognitive and language development of toddlers
- effects of a visual impairment on motor development of toddlers
- effects of a visual impairment on development of toddlers' self-help skills

- effects of a visual impairment on social-emotional development of toddlers
- adaptation of the caregiving environment to meet the needs of such toddlers.

OTHER RECOMMENDED INSTRUCTORS

Because of the nature of the content of this specific three-hour module, the training agency presenting this module may wish to contact other specialized persons within its local area who are willing to perform this duty, such as:

- teachers of visually impaired children.

CONTACT LIST

Persons to contact if the instructor has questions regarding this module include:

Carole Fox Abbott, Ph.D.
MITCH Project Specialist
FDLRS/South
5555 SW 93rd Terrace
Miami, FL 33165
(305) 274-3501

Susan Gold, Ed.D.
Assistant Professor of Pediatrics
Department of Behavioral Sciences
Mailman Center for Child Development
P.O. Box 016820
Miami, FL 33101
(305) 547-6624

Alan R. Morse, Ph.D.
Executive Vice President
The Jewish Guild for the Blind
15 West 65th Street
New York, NY 10023
(212) 769-6215

Ellen Trief, Ed.D.
Director of Early Intervention
The Jewish Guild for the Blind
15 West 65th Street
New York, NY 10023
(212) 769-6215

L. Penny Rosenblum, M.Ed.
Teacher of the Visually Impaired
St. Andrew's Elementary School
Charleston County School District
30 Chadwick Drive
Charleston, SC 29407
(803) 763-1503

Cathy Keller, M.S
Supervisor in Early Intervention
15 West 65th Street
New York, NY 10023
(212) 769-6215

EQUIPMENT, MATERIALS, AND SUPPLIES

Equipment

This module can be enhanced with the equipment listed below:

- overhead projector
- projection screen or alternative
- audiocassette recorder.

Supplies

The instructor should also have the following supplies available:

- chalk
- crayons or markers
- overhead (transparency) pens
- chart paper
- extension cord
- 3 prong/2 prong adapter plug
- masking tape
- transparent tape
- thumb tacks
- extra batteries
- extra pencils for participants.

Materials Contained in This Manual

The following materials are contained in this manual:

- reproducible forms (Appendix A)
- reproducible handouts/overheads and booklets (Appendix B)
- reproducible Six-Week Follow-Up Activity forms (Appendix C).

Videotape

No videotape accompanies this module.

Materials Not Contained in This Manual

In order to present this specific three-hour module, the following materials, which are not included in the packet, need to be obtained by the instructor:

- Blank 8½ x 11'' paper and a pencil for each participant (Hour 1)
- Scarves, strips of cloth or occluders (one per participant*) to cover the eyes for activities (Hour 2)
- Motor Activity Bag materials - see Activity page 12-2-1a following (Hour 2)
- Two or three types of finger foods, enough for each person to sample, such as raisins, sunflower or pumpkin seeds, jello cubes, fruit chunks or sliced vegetables, cereal, pretzels (Hour 2)
- Gauze for single eye patch (Hour 3)
- Cookie mix box, large bowl, large spoon, baking sheet, oven mitt, real cookies (Hour 3)
- A story book (Kitchen helper book) - see Activity page 12-3-1a following (Hour 3).

*Be certain these are used by one participant only, and then washed or thrown away to prevent transmission of harmful bacteria.

MOTOR ACTIVITY BAGS

You will need to gather the following materials:

- one paper bag for every two participants
- one occluder or blindfold for every participant (these should not be shared)
- one activity sheet (see below) for every two participants
- materials specified on each activity sheet to be included in the bag.

Procedure:

Put one activity in each bag. Make enough for all participants. Place each activity description in a bag with the appropriate materials for completing the activity. Vary activities so that participants will have an opportunity to share their experiences with the other participants. Duplicate the activity sheets and cut on the dotted line to separate.

Module	Hour	Activity
12	2	1a/1

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MOTOR ACTIVITY BAGS

ACTIVITIES:

1. The infant is six months old. Shake rattle approximately eight inches from the infant and encourage infant to reach for and grasp rattle. Experiment with varying distance of the rattle from the infant. Try holding rattle still. How does the infant respond?

2. The infant is eight months old. Hide music box under blanket and help the infant to find the toy under the blanket. Try the activity with music box playing music and silent. Which was easiest for the infant?

3. Infant is eleven months old. Place cereal in front of the infant and tell the infant to pick up cereal and eat it. Is the infant successful in finding all the cereal? How could you help the infant locate the cereal more easily?

4. The infant is twelve months. Take container and blocks and spread these around the infant. Help the infant retrieve the blocks and place them in the container. How can you help the infant learn how to find all the blocks?

5. Infant is three months old and starting to lift the head while laying prone on the stomach. Place music box eight inches from infant and observe if infant is more motivated to lift head when music box is playing or when music box is silent.

6. Infant is ten months old. Have several bimanual instruments (cymbals, tambourine, sand blocks). Place the instrument in the child's hands. Does the child bring hands together to play the instrument? How can you assist the child to use the instrument? Try motivating the child first by playing the instrument within reach.

Module	Hour	Activity
12	2	1a/2

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*MITCH Model of Interdisciplinary Training for Children with Handicaps

MOTOR ACTIVITY BAGS

ACTIVITIES:

7. Infant is seven months old. Have the following squeeze toys/objects: sponge, squeeze toys that make a noise, playdough, wet sponge. Assist infant to squeeze the toy/object. Which objects were more interesting or motivating for the infant to squeeze?

8. Infant is twelve months old. Have an audiotape recorder and "Wheels on the Bus" audiotape. Play verse: "people on the bus go up and down" and tell the infant to put hands up and down. How can you help the child understand up and down? What types of verbal or vocal cues (e.g. intonation) can you use?

9. Infant is seven months old. Place a small bin of feathers/cotton/sand in front of the infant. Help the infant feel the textured material by taking the infant's hands and putting them in the bin. How did the child react? How could you help the infant be more prepared and willing to feel the texture in the bin?

10. The infant is eleven months old. Simulate a bathtub situation by sitting on the floor and using the floor surface as the water. Caregiver puts a squeeze toy in the water near the child and asks the child to find the toy. Is the child successful in finding the toy? How can you motivate the child to find the toy without guiding the child's hand to the toy? What happens if you place the toy so that it is touching a part of the child's body?

11. Infant is twelve months old. Have a can and a few blocks. Place the can to the child's left or right side. Give the child a block to hold and ask the child to put it in the can. Was the child able to do it? How could you make it easier for the child?

Module	Hour	Activity
12	2	1a/3

Florida Department of Education
Division of Public Schools
Bureau of Education for Exceptional Students

*MITCH: Model of Interdisciplinary Training for Children with Handicaps

Instructions for Preparing Kitchen Helper Book

You will need to:

- color in the pictures on the four-story pages
- paste or staple the pages together to make the book
- gather:
  - box of cookie mix
  - large bowl
  - large spoon
  - cookie sheet
  - oven mitt
  - real cookies.

During second reading of story, follow the directions given below.

Page 1 - Pass around the cookie mix. Let the participants shake the box to feel if it's "full." Open it up and let the participants smell it.

Page 2 - Pass around the bowl. Let the participants take turns pretending to mix with the big spoon. Sing "Mix it . . . !"

Page 3 - Pass around the cookie sheet and let the participants pretend to put a spoonful of batter onto the cookie sheet. Count.

Page 4 - Pass around the oven mitt and let the participants try it on. Allow each participant to have a real cookie.

Module	Hour	Activity
12	3	1a

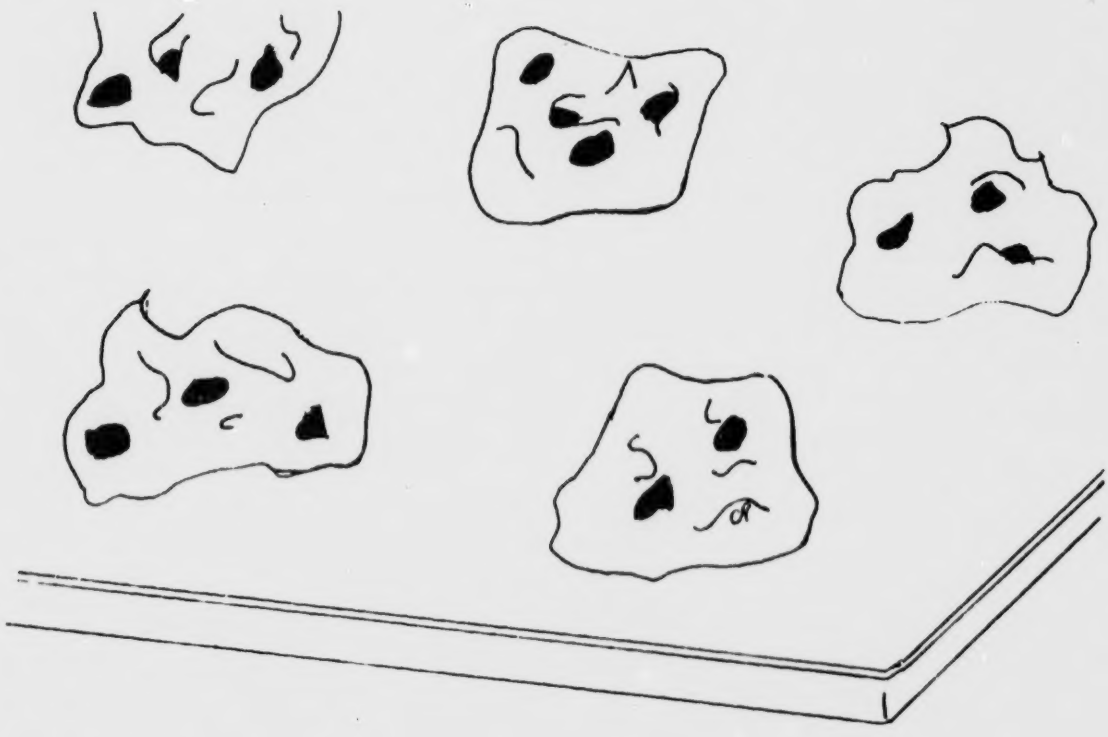
Florida Department of Education
Division of Public Schools
Bureau of Education for Exceptional Students

*MITCH: Model of Interdisciplinary Training for Children with Handicaps

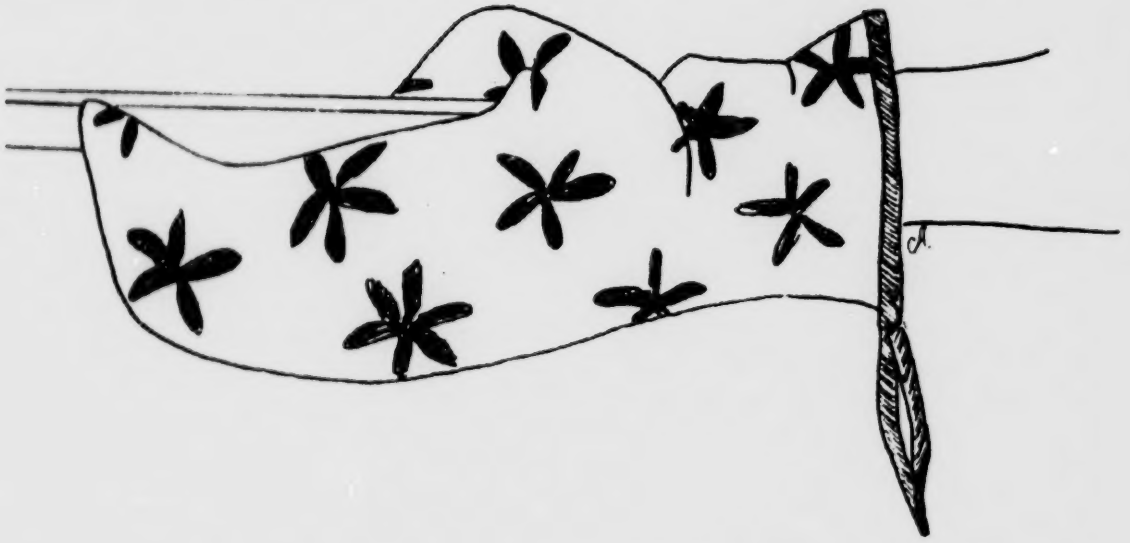
KITCHEN HELPER

Hi, my name is Sarah and I am going to help my Mom make cookies. Yum, I can't wait! Here comes Mom now with the cookie mix.

I hold the bowl as Mom pours in the cookie mix and the milk. Then I get to mix with a big spoon. We sing, "mix it, mix it, mix it!"



Now it's ready to be scooped onto the cookie sheet. Mom and I take turns . . 1, 2, 3, 4 . . and a lot more. Then into the oven the cookies go. Waiting is the hardest part. They sure smell good.



Ding! They're ready! Mom wears a special glove when she takes the cookie sheet out of the oven so she won't burn her hand. In a few minutes, when the cookies cool, I get to try the first one. And it is good!

Module 12
VISUAL IMPAIRMENTS:
What You Need to Know

HOUR 1

Goal: **PARTICIPANTS WILL GAIN KNOWLEDGE OF THE FUNCTION OF THE VISUAL SYSTEM AND COMMON VISUAL DISORDERS.**

Objectives - ***Participants will gain an understanding of:***

- function of the visual system
- terminology used to describe visual impairments
- concept of orientation and mobility
- visual disorders
- signs of visual disorders.

5 minutes **GREETING, SIGN IN, AND DISTRIBUTION OF HANDOUTS**

SESSION BEGINS

4 minutes **LECTURE/DISCUSSION: Introduction**

Say: In the next three hours we are going to discuss visual impairments and increase our understanding of how infants and toddlers with varying degrees and types of visual impairment develop and function. I will use the term visual impairment as a general term when describing the range of eye conditions a person may have. Throughout the three-hour module, we will talk more specifically about the varying levels of visual impairments and their effects on the development of children from birth to three years of age.

We know that more incidental, or natural, learning occurs through the use of sight than through any other sense. As much as 80% of learning is visual. When a child sees another person do something, the child will often imitate that behavior.

Ask: Can anyone think of something a child learns incidentally, or naturally, by watching someone else?

Instructor leads discussion to include skills such as:

- brushing teeth
- looking at a book
- using a spoon.

Say: Children with visual impairments can learn to do all the things we just listed. How do you think children who are totally blind and cannot see others learn new skills such as brushing their teeth?

Instructor leads discussion and summarizes by concluding that children with visual impairments rely on their other senses: hearing, touch, taste, and smell to learn new skills. Instructor emphasizes that children with

visual impairments must learn to use whatever vision they have to provide the greatest opportunity for reaching their fullest potential.

Say: Before discussing how children with visual impairments learn, it is important to have an understanding of the way the visual system works and some of the reasons why this system does not work correctly in children with visual impairments.

6 minutes

LECTURE/DISCUSSION: Function of the Visual System

Say: As we discuss the function of the visual system, the eyes and brain, you can refer to Handouts 12-1-1 and 12-1-2. You do not have to memorize the names or functions of each part of the visual system. These handouts are a good reference to have.

Handout/ Overhead 12-1-1 & 12-1-2

Instructor refers to **Handouts/Overheads 12-1-1** and **12-1-2**.

Say: There are three main players in the visual system, the eyes, the optic nerve, and brain. The eye collects light reflected from everything around us. The light helps make up the images we see. The brain interprets this information sent by the eye and tells us about the size, shape, and color of the things from which the light was initially reflected. To better understand this process let us follow a beam of light as it enters the eye.

Say: Light first enters the eye through the cornea. This is the front portion of the eye and it is transparent, or clear. The cornea has two jobs. The first is to protect the eye. Its second job is to refract, or bend, light rays so that they can better pass through the other structures, or parts, of the eye.

The iris is the colored portion of the eye. It controls the amount of light entering the eye by dilating and contracting, or opening and closing, the pupil.

The pupil is the part of the eye which appears as a black circle in the center of the iris. Light comes in through this opening.

The lens is semi-transparent. It is behind the iris and its function is to focus the light rays on the back part of the eye, or retina, just as a lens in a camera focuses the light on the film.

The retina in the back of the eye acts as the film does in a camera. There are two types of cells in the retina. Each has a special job. The cone cells allow us to see color and let us see the details of an object. The rod cells are responsible for night and peripheral, or side, vision. They allow us to see gross, or large, movements, and black and white (or light and dark contrasts).

The optic nerve is the nerve tract which runs between the eye and the brain. The optic nerve carries the information from the eye to the brain. The brain interprets, or reads, the information from the eye and lets us see the object the light was originally reflected off of.

Say: Let's summarize how a person sees an object. A light ray is reflected from an object and enters the eye through the cornea. It then passes by the iris through the pupil, is focused by the lens onto the retina, is passed through the optic nerve to the brain which reads the signal and tells the person about the size, shape, and color of the object. This process happens constantly, just as the heart is always pumping blood. The eyes are really an amazing part of the body!

Say: All parts of the eye must work together in order for us to see. When there is a problem with any part of the eye, the optic nerve, or the brain, a visual impairment results.

Children with visual impairments need to be seen regularly by an eye specialist. There are three

types of eye specialists. Ophthalmologists are medical doctors who can perform surgery on the eye in addition to prescribing glasses and contact lenses. Optometrists can prescribe contact lenses and glasses, but are not able to perform surgery or other medical procedures. An optician is a professional who prepares contact lenses and glasses. Opticians and optometrists are not medical doctors. Generally, children with severe visual impairments should be under the care of an ophthalmologist.

10 minutes

LECTURE/DISCUSSION: Terminology Used to Describe Visual Impairments

Say: Doctors and teachers trained to work with children with visual impairments often discuss a child's visual impairment using numbers that measure a child's visual acuity or visual field. Developing an understanding of how visual acuity and visual field are measured will enable you to better communicate about the child with others who are also involved with the child's development.

Acuity is a measurement of how clearly a person can see an object at a given distance. I am sure that you have all heard that 20/20 is normal vision. Let's explore what those numbers mean.

Handout/ Overhead 12-1-3

Instructor refers to **Handout/Overhead 12-1-3**.

Say: This handout/overhead shows a diagram of a typical Snellen eye chart. This chart represents the most common method used to measure acuity. The large E at the top of the chart represents 20/200 while the letters at the bottom of the chart usually represent 20/20. We can demonstrate 20/40 acuity right here in this room.

Instructor chooses two volunteers to demonstrate 20/40 acuity. The instructor has Volunteer 1 stand at the back of the room facing forward, and Volunteer 2 stand at the center of the room, also facing forward. The instructor selects an object, such as a book, for the two volunteers to view and places it in the front of the room.

Say: We will pretend that Volunteer 1 in the back of the room is 40 feet from the book, and Volunteer 2 in the center of the room is 20 feet from the book. Let's say that both can see the book with the same degree of clarity. Let's further say that Volunteer 1 has "normal" visual acuity of 20/20. Then we can say that Volunteer 2 has a visual acuity of 20/40. Volunteer 2 has less than normal, or decreased, acuity and must be 20 feet from what a person with normal acuity can see at 40 feet.

Handout/ Overhead 12-1-4

Instructor refers to **Handout/Overhead 12-1-4** and continues to clarify and reinforce this concept.

Say: When a person's vision is described as 20/100, it means that the person can see an object at 20 feet with the same clarity that a person with normal, or 20/20 vision, can see way back at a distance of 100 feet.

Say: You can imagine now how little a child with 20/200 vision can see. At 20 feet the child with 20/200 vision would only be able to see the large E at the top of the Snellen chart. Everything below that might appear to be very blurry. Children who have poor visual acuity can often get glasses or contact lenses that correct their acuity and allow them to see with 20/20 vision.

Handout/ Overhead 12-1-3

Instructor again refers to **Handout/Overhead 12-1-3.**

Say: At 20 feet the person with normal vision can see the letters on the line marked 20/23 on the Snellen chart.

Handout/ Overhead 12-1-5

Visual ability is also measured in degrees of a field.

Instructor refers to **Handout/Overhead 12-1-5** and demonstrates with hand motions while giving the following explanation.

Say: Imagine that there is a circle all the way around me. That is 360 degrees. Since we don't have eyes in back of our heads, much as we may wish we did,

we are only concerned with less than half, or approximately 150 degrees, from one shoulder to the other.

Instructor stands with arms extended straight out on each side. Move straight arms forward to come together at midline to demonstrate 150 degrees as the area through which the arms have moved. Point out that this makes up the normal visual field.

Say: This area is called our visual field. Sometimes, due to visual disorders, a child may have a visual field of only 10, 20, or 30 degrees.

Instructor uses arms to demonstrate these visual fields.

Say: A child with such a small visual field is not able to see things that are peripheral, or to the side. Think of looking into a tunnel, or through a tube, and you may get an idea of what this type of vision is like.

Say: Doctors and teachers use acuity and visual field measurements when describing children with visual impairments. Some terms that you may hear them use are on Handout 12-1-6.

Handout/ Overhead 12-1-6

Instructor refers to **Handout/Overhead 12-1-6**.

Say: Legally blind is a term used to describe a person who, after the best possible correction, such as that made by glasses or contact lenses, in the better eye, has a visual acuity of 20/200 or worse, or a visual field that is restricted, or decreased, to 20 degrees or less.

Individuals who are partially sighted have a measured visual acuity in the better eye, after correction, of 20/70 to 20/200. These individuals can usually read regular print, but may need some large print materials. People with corrected visual acuities between 20/20 and 20/70 are considered to be within the normal range and are not visually impaired as far as our legal system is concerned even though they may wear glasses or contact lenses.

In the State of Florida, teachers of the visually impaired are concerned with legal definitions, because special materials can be ordered for children who are totally blind, legally blind, and partially sighted. When a child meets eligibility criteria for programs for the visually impaired, the child then qualifies to receive instructional materials from the Florida Instructional Materials Center for the Visually Handicapped. The address is 5002 N. Lois Avenue, Tampa, FL 33614. The phone numbers are (800) 282-9193, and (813) 876-5016. Materials that may be ordered for a young child with a visual impairment include:

- flashlights and other lights to stimulate vision
- sensory materials such as bells, vibrators, and textured toys
- books with raised drawings and braille for the child to feel
- large textured blocks
- textured puzzles
- taped material.

Another important address for you to have is for the American Printing House for the Blind. That address is: 1839 Frankfort Avenue, (Mailing address: P.O. Box 6085), Louisville, KY 40206-0085. The phone number is (502) 895-2405

Say: If the child in your care has a doctor's report that states the child is totally blind, legally blind, or partially sighted you should contact your school district's local teacher of the visually impaired to find out what materials are available for the child.

The visual acuity of young children is often hard for a doctor or teacher to measure, or determine. Young children do not know how to read, so tests such as the Snellen chart are not good to use.

Handout/ Overhead 12-1-7 & 12-1-8

There are other charts, such as the ones on Handouts 12-1-7 and 12-1-8, that can be used with some preschoolers.

Instructor refers to **Handouts/Overheads 12-1-7** and **12-1-8**.

Say: When using the Tumbling E chart the tester can have the child point in the direction the legs of the E are facing. Another method is to have the children hold a card with an E on it in the same direction they see it on the chart.

The second chart consists of the New York Association for the Blind Flashcards, more commonly referred to as the "Apple, House, and Umbrella" chart. When using these cards to assess, or measure, acuity the tester can use several methods. The child can tell what symbol the tester is pointing to. The child can be given three cards, each containing one symbol, and can be asked to hold up or point to the card with the same symbol as the tester is pointing to.

Another method for measuring a young child's visual abilities is observing the child in a play atmosphere. By watching carefully, one can observe whether a child sees objects at a distance, or whether the child seems not to see objects in a certain field or location, and so on.

There are many medical tests which can be used by trained doctors to examine the parts of the visual system in young children. Reports about the visual abilities of children may include terms such as:

- hand motions (H.M.), which means the child saw the tester's hand moving at a certain distance, such as 3 feet
- counting fingers (C.F.), which means the child counted the tester's fingers at a specified distance

- light perception (L.P.), which means the child could perceive, or tell, if a light was on or off.

Say: There are many terms used by teachers and doctors when they speak about children with visual impairments. What is important to remember is that each child has unique visual abilities. With time you will learn what the particular child with whom you work can and cannot see if you are careful to watch how the child responds to light and activities. Two children with the same eye disease and acuity measurements may actually "see" very differently.

5 minutes **LECTURE/DISCUSSION: Orientation and Mobility**

Say: When we observe children's visual abilities, important areas we can look at are orientation and mobility. Let's talk about what this means. As adults, we travel from place to place often without even consciously thinking about the path we need to take to get to our destination. Through experience we know which roads to drive on or which streets to walk along. We can travel within our environments from room to room.

I would like each of you to picture in your mind a map of your caregiving setting. On a piece of scratch paper draw a quick picture showing your room, other rooms, the office, the cafeteria, etc.

Instructor allows 2 minutes for participants to draw maps.

Ask: Were each of you able to draw a simple map which relates each room in the caregiving environment to the others?

Say: By accurately drawing a map you were demonstrating the concept of orientation. You understand how rooms relate to each other. You know where things are in the environment. This isn't an easy task for a person with visual impairments. Teaching

orientation to children with visual impairments needs to begin at an early age.

Ask: How do you think we can help young children with visual impairments become oriented in their environment?

Instructor leads discussion to include:

- telling children what rooms they are in
- when taking a child from place to place, describe the places you are traveling past
- provide extra tactual experience (help child feel doorways, closets, wall surfaces, walk barefoot, etc.)
- provide additional cues in everyday orientation activities (beads on classroom door, rug in circle area).

Say: Orientation means knowing where things are and how they relate to each other. Orientation can occur anywhere. An infant or toddler needs to become oriented to the location of food on the highchair tray, location of favorite toys, and layout of the home and caregiving setting.

Mobility involves the ability to travel from place to place. How do young children move from place to place?

Instructor leads discussion to include:

- rolling
- crawling
- creeping
- cruising
- walking
- running
- hopping
- jumping.

Say: Visually impaired children may need encouragement and motivation to travel from place to place. We

will talk more about how to motivate children in Hours 2 and 3.

10 minutes **ACTIVITY: Orientation and Mobility Experience**

Say: Now, I would like each of you to have an opportunity to pretend you have decreased vision while you try to move around. When blind people walk with others they use a technique, or method, called sighted guide. I need a volunteer to help me demonstrate the sighted guide technique.

Instructor selects a volunteer to come to the front of the room who will act as the guide during the following demonstration. Instructor and participants will use cloth blindfolds or paper eye occluders to cover their eyes during this activity. Remind participants not to exchange blindfolds with one another. If they do, there is a chance that they will pass harmful bacteria from one to another. Emphasize that this can happen with children as well. They need to consider this if they play games such as Pin the Tail on the Donkey.

Say: I will be the person who is blind and my volunteer will be the sighted guide. When you are acting as a guide for a person who is blind or visually impaired, it is important that you do not grab or pull. You must let the person hold onto you. This is something we can begin teaching older toddlers. To act as sighted guide, the guide stands to the side of the person who is blind and asks that person if assistance is needed. If the person who is blind responds that it is, that person will likely reach out for the guide's arm. The person who is blind will hold the arm of the guide above the elbow with the thumb side of the hand facing out.

Instructor demonstrates the proper handgrip.

Say: The guide walks at a normal pace and the person who is blind follows one step behind. By walking one step behind the guide, the person who is blind is able to feel any changes that the guide is making, such as turning or going up or down steps.

Instructor and volunteer demonstrate walking using the sighted guide technique.

Say: I would like each of you to find a partner. One partner will wear a blindfold or an occluder and act as the person who is visually impaired and the other partner will serve as the guide. Try walking around this room and out in the hall. After two or three minutes, switch positions, so that you each get to experience being the guide and the blind person. I will be walking around if you need help.

Instructor allows time for each participant to find a partner and practice sighted guide techniques. Instructor walks among pairs, assisting and giving encouragement. Encourage participants to spread out and go into the hall, using as much space as possible.

Say: You all did a great job! Please return to your seats. Let's talk about how it felt to be a person with visual impairments for a few moments.

Instructor leads discussion to include:

- fear
- necessity to trust guide
- uncertainty about location in space (orientation).

Ask: How did it feel to be the guide?

Instructor leads discussion to include:

- uncertain about how to go about task
- awkward
- shy/embarrassed.

Say: Think for a minute about how it must feel for a young child who is totally blind. As sighted adults you were already familiar with the space you were traveling in. You were able to use other senses to supplement for lack of vision. A young child has not yet developed these abilities. It is important for us, as caregivers, to remember that a child with visual impairments may be

fearful or confused when traveling in new environments.

Say: When we work with young children who do not yet walk we generally carry them. As you carry a child you can encourage orientation and mobility development by:

- describing the environment
- allowing the child to assist in opening and closing doors
- allowing the child to touch the walls, carpets, etc.

Say: With toddlers who are walking, orientation and mobility skills training is important. A modified method of sighted guide in which the child holds the guide's hand can be taught. When children become older they can be taught to hold the guide's wrist. The caregivers continued description of the environment is essential. As children develop they should be encouraged to travel independently within the caregiving setting and home. Independence within these settings increases as familiarity with these settings increase.

Each child's orientation and mobility development will be unique. If the child is having difficulty traveling in familiar environments, such as the caregiving setting or home, you should speak to your center director regarding your concerns. The child's parents should be encouraged to consult an orientation and mobility specialist to determine how best to assist the child in developing more independent and safe travel skills.

10 minutes **LECTURE/DISCUSSION: Disorders of the Visual System**

Say: A visual disorder is called congenital when the child is born with the impairment. If the visual impairment develops after birth it is called an adventitious disorder. It is important to know

how old the child was when the visual impairment occurred, because a visual impairment affects the child's development. We will talk about the effects a visual impairment has on development in Hours 2 and 3.

Say: There are many causes of vision impairments. Almost 70% of visual impairments result from hereditary defects passed to the child from either parent, just as hair color or height is passed to the child by the parents. Other causes of visual impairments include:

- prematurity - the visual system may not be fully developed
- infections during pregnancy (e.g., rubella, toxoplasmosis, herpes)
- difficult labor and delivery (e.g., brain damage from insufficient oxygen, damage to the central nervous system)
- accidents (e.g., head injuries, retinal detachments)
- degenerative conditions (e.g., degenerative myopia, retinitis pigmentosa).

Say: Some of the more common visual disorders and terms that describe them are listed on Handout 12-1-9. Again, you do not have to memorize this information. It is provided to serve as a reference.

Handout/ Overhead 12-1-9

Instructor refers to **Handout/Overhead 12-1-9**.

Say: Some visual disorders affect one part of the eye and interrupt, or stop, that part of the eye from functioning, or working, properly.

Examples of this type of visual disorder are:

- Cataracts, which are an opacity, or cloudiness, of the lens. Light is not able to pass through the lens to the retina. Cataracts often cloud only a portion of the

lens, but in extreme cases they completely preclude or prevent vision by blocking the entire lens. Cataracts can be caused by an inherited disorder such as Marfans Syndrome, a prenatal infection such as rubella or herpes, or a secondary condition to another impairment such as Down syndrome. In some cases, treatment for cataracts involves surgery in which the lens is removed. Special glasses or contact lenses are prescribed to do what the lens used to do.

- Optic atrophy is the partial or complete loss of small blood vessels on the surface of the optic nerve. Remember, this is the nerve that carries messages from the eye to the brain. This disease affects the ability of the optic nerve to carry a signal from the retina to the brain. Damage from optic atrophy is generally permanent.

Say: Other visual disorders affect the eye's refractive power, or ability to bend light so that it focuses on the retina or the back of the eye. These conditions result in decreased, or lessened, acuity. As you remember, acuity is a measurement of the extent to which one sees a given object at a given distance. The following are examples of refractive disorders:

- Myopia, or nearsightedness, occurs when the shape of the eye causes the light rays to focus in front of the retina. Corrective lenses can focus the light rays onto the retina and improve the child's acuity. Children with myopia generally see well up close, but have difficulty seeing things far away.

- Hyperopia, or farsightedness, is caused when the light rays come to a single point of focus behind the retina. As with myopia, special lenses can improve the child's acuity.

Children with hyperopia generally can see well at a distance, but have difficulty seeing up close.

- Astigmatism occurs when there are multiple, or many, points of focus for light rays on the retina. Astigmatism can usually be corrected with glasses or contact lenses.

Say: Other visual disorders are due to muscle imbalance in the eye. Many muscles control the eyes, and if one of these muscles is not lined up properly, this will affect the image seen by that eye. The following are examples of muscle imbalance disorders:

- Strabismus occurs when one or both eyes deviate, or turn, either inward, outward, upward, or downward. This deviation causes the brain to receive a slightly different message from each eye. The brain sees one message and ignores the other. The ignored eye becomes weaker over time, and, if not corrected, will become permanently impaired. Strabismus occurs in between one and four percent of the population. It can usually be corrected by glasses, eye patching, or, if necessary, surgery. It is very important to have this condition corrected as early as possible. If you observe that one or both eyes of a child deviate, or turn, it is important that you speak to your center director or the child's parents about your concern. The child will need to be seen by an ophthalmologist, or medical eye doctor, in order for the condition to be monitored.

- Amblyopia is commonly called "lazy eye" and occurs when the muscles in one eye are weaker than the muscles in the other eye. The signal that the weak eye sends to the brain is weaker than the signal from the stronger eye. This is the same thing that occurs with

strabismus. If amblyopia is not corrected the brain will learn to ignore the weaker signal and reduced visual acuity will result. Amblyopia is corrected with glasses or eye patching.

- Nystagmus is an involuntary motion of one or both eyes. Movements may be horizontal, vertical or a combination.

Say: It is important to remember that a child may have more than one visual disorder. For example, the child may have cataracts and strabismus. Visual disorders may be very mild and easily corrected, or they may be severe and unable to be fully corrected. Each child's visual impairment is unique.

5 minutes **LECTURE/DISCUSSION: Signs of a Visual Impairment**

Say: Sometimes at birth or shortly after birth doctors and/or parents can tell that there is something wrong with the newborn's eyes. The structure of the eye may be impaired, as in the case of aniridia, which is the absence of the iris. As soon as a child's visual impairment is diagnosed, medical treatment and educational services should begin.

Other children, for example those with myopia or hyperopia, may appear to be normal in their visual development. Usually, these children must enter school before their visual impairment is detected. That is what makes your role as the child's caregiver so important. If you observe a child who seems to be having a visual problem you should speak to your center director. The child's parent or guardian may need to take the child to an ophthalmologist or optometrist. These doctors are trained to recognize and treat visual impairments.

There are many signs that may indicate a possible visual impairment. These signs are listed on your Handout.

Handout/ Overhead 12-1-10

Instructor refers to **Handout/Overhead 12-1-10** and reviews Signs of a Possible Visual Disorder

Say: You may notice that the child has one or more of the following signs of visual disorders:

- has red eyes
- rubs eyes excessively
- indicates that eyes are itchy
- blinks eyes excessively
- squints eyes excessively
- eyes tear excessively
- has one or both eyes turning inward, outward, upward, or downward
- shuts or covers one eye
- tilts head to one side to see objects/activities
- thrusts head forward
- has red-rimmed, encrusted, or swollen eyelids
- is overly sensitive to light
- has recurring styes
- complains of headaches, dizziness, or nausea following close eye work
- appears disoriented (trips, bumps into objects).

Say: You may also notice a change in the child's behavior as a result of a visual impairment.

Ask: Why do you think the child's behavior may change or be different if a visual impairment is present?

Instructor leads discussion to reflect that children who do not see what is going on around them may become:

- distracted
- disruptive

- withdrawn
- aggressive
- bored.

Say: In the majority of cases, children do not simply wake up one morning and have a visual impairment. Visual impairments may be present for years, possibly from birth, before being detected. Society does not put many formal visual demands on children until they enter school even though vision is a most important channel for learning. Young children can run up close to objects, bring objects closer to their eyes, and touch objects more easily than older children who must sit and be part of a group. Think for a minute about the group activity of storytime in a preschool classroom.

Ask: Where is the teacher? Where is the book the activity is focused around? Where are the children?

Instructor leads discussion to reflect that in many group activities the adult and objects used in the activity are at the front of the room and the children are usually seated several feet away.

Say: If a child cannot see the objects on which the activity is focused, it is not surprising that the child may become bored or aggressive.

Say: If you notice a change in a child's behavior you should talk to your center director or the child's parents about what you have observed. A medical examination may be recommended.

Say: Our first hour is almost over. We have talked about many things so far. Do not feel you have to memorize the function of the visual system or the names of visual disorders. Keep your notes and handouts, so that you will have a good reference

if you have a child with visual impairments in your caregiving environment.

5 minutes
(omit if 3-hour presentation)

END OF HOUR 1 - Closing

MODULE 12
VISUAL IMPAIRMENTS:
What You Need to Know

HOUR 2

Goal: **PARTICIPANTS WILL GAIN KNOWLEDGE OF HOW A VISUAL IMPAIRMENT EFFECTS THE DEVELOPMENT OF THE INFANT FROM BIRTH TO ONE YEAR.**

Objectives - ***Participants will gain an understanding of:***

- effects of a visual impairment on cognitive and language development of infants
- effects of a visual impairment on motor development of infants
- effects of a visual impairment on development of infants' self-help skills
- effects of a visual impairment on social-emotional development of infants.

NOTE TO INSTRUCTOR: Many activities and the sequence of development presented in this hour are based on information from The Oregon Project (see Reference or Resource List).

5 minutes
(omit if 3-hour presentation)

GREETING, SIGN IN, AND DISTRIBUTION OF HANDOUTS

SESSION BEGINS

5 minutes

LECTURE/DISCUSSION: Overview of Factors Affecting the Development of Visually Impaired Infants

Say: In the next hour we will explore how a visual impairment affects the development of infants from birth to one year of age. During the final hour of the module we will discuss the effects of a visual impairment on the development of children 12 to 36 months of age. Generally speaking, children with visual impairments achieve, or reach, the same developmental milestones as sighted children, but at a slower rate. This statement is not true for every child, because each child's development is unique.

The development of a child with a visual impairment is affected by four factors. The first is the type and severity of the visual impairment(s). In Hour 1 of this module we discussed the different causes of visual impairments and the effects these can have on what an individual actually sees. The severity of a visual impairment can range from total blindness to the ability to read normal print material, with an acuity of 20/70. Knowing the cause and severity of the child's visual impairment is important when planning activities in the caregiving setting. If the child has a condition such as cataracts, the child may have difficulty with eye-hand coordination because removal of the lens interferes with the way the child sees. A teacher of the visually impaired, the child's parents, and the eye specialist can assist you in

learning more about the child's specific eye condition.

A second factor affecting development is the child's age when the visual impairment occurs or is diagnosed. The earlier an impairment is identified, the sooner intervention with the child, family, and caregivers can begin.

Intervention may include instruction by a trained teacher in the home or caregiving setting, who will provide ideas and feedback concerning the child with visual impairments. Intervention could also include written materials, videotapes, or lectures that caregivers can utilize to learn more about helping the child's development. If the visual impairment is not detected, or diagnosed, people may assume that the child with visual impairments can see. The child may not receive help in interpreting the environment. The earlier intervention is started, the more benefits the child will receive and the better the chances are of the child developing normally.

A third factor affecting the development of a child with visual impairments is the presence of multiple handicaps. For example, if the child has a severe visual impairment and also cerebral palsy, a condition which makes it hard for the child to move, that child will be even more restricted. The child will have difficulty moving towards things in the environment, and may not be able to see what is in the environment. If cerebral palsy restricts the child's ability to turn the head and the child can only clearly see objects at a distance of one foot, then the child will miss all objects to the sides and any objects farther than one foot away. When a child has multiple handicaps it is important to work with the child's parents, therapists, teachers, and eye specialists to plan an effective program for the child.

The final factor affecting a child's development is the environment itself. The previous three factors cannot be changed much by caregivers. The environment can be positively affected, or changed, by the caregiver. I'll give you some examples of how to positively change the environment for an infant with visual impairments in just a minute. First, however, we need to discuss the concept of environment.

Ask: What is the child's environment?

Instructor leads discussion to include:

- physical environment - furniture, floor coverings, walls, sounds, smells, textures, visual stimuli
- social environment - parents, siblings, peers, caregivers
- emotional environment - mood, levels of interactions among people, tones used in voices.

Say: When a child has a visual impairment it often becomes necessary to adapt, or modify, the physical, social, and emotional environments for that child. Since each child is unique, there is not one set of rules on what adaptations will need to be made. Many adaptations are simple and do not require any special materials or additional time.

Instructor provides participants with the following examples using a question and answer technique.

EXAMPLE 1 - The infant may be sensitive to light (photophobic), and the adaptation of not placing the child in direct light would be necessary. For example, the child's crib should not be placed directly under a window. The child may need to wear a hat when going outdoors to provide protection from the sunlight.

EXAMPLE 2 - The infant with poor acuity who is finger-feeding on a beige highchair tray will have difficulty seeing beige colored cereal on the tray. The caregiver could place a contrasting placemat or other material on the highchair tray and then put the cereal on top of this for a better visual contrast.

EXAMPLE 3 - The infant who does not raise the head while lying on the stomach would be more motivated to do so by a musical or sound toy. A child who cannot see a brightly colored toy, no matter how attractive, does not realize that there is something to look at, and therefore is not motivated to raise the head.

Say: As with any child, it is important for the adults to provide a warm and supportive environment. The child with visual impairments misses simple reassuring gestures from adults such as a smile, nod, or eye contact. You can help the child gain self-confidence and feel comfortable by providing praise.

Ask: What are forms of social praise you can use with infants?

Instructor leads discussion to include:

- verbal comments (e.g., "you ate so carefully," "nice waiting")
- clapping
- hugs
- pats
- tickling.

Say: Often environmental modifications are not only helpful for children with visual impairments, but are also helpful in promoting development in all children in the caregiving setting. For example, when working with young children with visual impairments, it is important to say their names when approaching them so that you do not startle the children and so the children begin to learn their own names. If you say each child's name when you approach, you will be helping all the children learn their names. Additionally, you will not be treating children with visual impairments any differently than you treat the other children in your care.

Say: Development of all children, whether they have visual impairments or are normally sighted, will be sequential, or hierarchical. This means that

children generally pass through a predictable series of development in which milestones, or key skills, are achieved one after the other.

Ask: What are common gross motor, or movement, milestones achieved by infants in the first year?

Instructor writes list on chalkboard or flipchart to include:

- lifting head up
- rolling
- sitting
- crawling
- standing
- walking.

Instructor briefly discusses examples of developmental sequences which include:

- rolling over before crawling
- standing before walking
- babbling before saying words
- sucking before chewing.

Emphasize that not every child learns every skill, nor do children always follow the same progression when acquiring skills. However, generally speaking, there is a developmental sequence children follow when learning gross motor, cognitive, language, social-emotional, and self-help skills.

Say: A developmental curriculum assists caregivers in observing a child's behavior to determine if the child is functioning at age level. It is important to remember that a developmental curriculum is only a guide. Each child's development is unique and may not achieve every skill listed in the curriculum.

Instructor may wish to bring samples of developmental curricula such as The Oregon Project, The Hawaii Early Learning Profile, or the Carolina Curriculum for Handicapped Infants (see Resource and Reference lists).

Say: The first three years of a child's life are a critical time for development. Children are constantly learning new things. By having an understanding of developmental milestones and the sequence of development, you will be better prepared to enhance the child's development. Handout 12-2-1, *Welcome to the World*, provides one list of developmental milestones for each area of development and suggests activities to help the child reach these milestones.

Handout/ Overhead 12-2-1

Instructor refers to **Handout/Overhead 12-2-1**.

Say: During the remainder of this hour we will discuss ways to adapt activities to encourage the cognitive/language, motor, self-help, and social/emotional development of infants with visual impairments.

10 minutes

LECTURE DISCUSSION: Cognitive and Language Development in the Visually Impaired Infant

Say: Cognitive or intellectual development involves the ability to think and reason. Language development is concerned with the child's ability to communicate. Communication includes both verbal, and nonverbal skills. Nonverbal skills include turn taking and body language such as eye contact and facial expressions. Children with visual impairments often have difficulty in developing nonverbal communication skills. We will talk about ways to help these children develop these skills.

For a minute I would like you to close your eyes and imagine a cup. On a piece of paper please write down five words that describe the cup you see in your head.

Instructor allows time for participants to write down adjectives describing a cup. Select several participants to read their adjectives and write responses on the flipchart or chalkboard. Discuss the following with participants:

- Each individual described a cup, but many of the cups are different from each other.
- Every person brings unique experiences to every situation.
- There are many ways to describe an object or event.

Say: With these considerations in mind, the need to provide children with a variety of experiences, in order for them to learn that there is not just one representation of an object or one way to do an activity, becomes apparent. Children with visual impairments need to have many, varied experiences in order to learn about their environment. However, simply providing a child with three or four different rattles to play with is not enough. As the child's caregiver, you must help the child learn about the rattles by helping the child discover different ways to play with the rattles, and by describing the different rattles to the child.

For the following demonstration, the instructor selects a participant to act as a six-month-old infant while instructor acts as the caregiver. Instruct participant to be a passive child sitting in an infant seat. The instructor helps the participant, hand-over-hand, to play with the rattle and describes the participant's activity and the rattle as the participant plays. Examples of phrases to use include:

- "You have a rattle in your hand."
- "You are shaking the rattle."
- "You can bang the rattle on the table."
- "Do you hear the sound the rattle makes when you shake it?"
- "The rattle feels smooth when you put it in your mouth."
- "Can you hold the rattle by yourself?"

Say: Children learn many things by watching others in their environment. Visual impairment, greatly diminishes, or decreases, the child's ability to see what is going on in the environment. The child may not respond to an activity in the same way a sighted child would. Language develops as a

result of interaction with the environment. When children with visual impairments are limited in the amount of interaction they have, their language development will be affected.

Ask: How do infants communicate their needs and desires?

Instructor leads discussion to include:

- crying
- smiling
- reaching
- cooing
- grimacing
- babbling.

Say: Caregivers quickly learn to interpret the infant's verbal and nonverbal signals. Sometimes it is difficult for a caregiver to accurately interpret the signals of an infant with visual impairments. For example, let's think for a minute about a four-month-old sighted infant who is lying in a crib. The infant has just awakened from a nap and is babbling and cooing.

Ask: What do you think the infant would do if the caregiver entered the room?

Instructor leads discussion and summarizes that the infant may:

- increase the level of vocalizations
- turn in the direction of the caregiver
- increase body movements (e.g., wiggling)
- smile.

Say: The responses we discussed are typical of sighted infants. An infant with severe visual impairments or multiple handicaps often will respond in quite a different manner. On hearing the caregiver approach, the infant with visual impairments may stop vocalizing and stiffen. This happens because

the infant is startled by the sounds the caregiver makes. The infant stops vocalizing in order to hear what is going on in the environment.

Ask: If you were the caregiver who approached this infant and did not realize the infant was visually impaired, how do you think the reaction of quieting and stiffening would make you feel?

Instructor leads discussion to include:

- The infant was happy and now seems upset.
- The infant doesn't want to interact with me.
- The infant wants to be left alone to engage in a vocal game.

Say: These are quite common responses by caregivers who do not realize the infant is visually impaired or by caregivers who do not know how to interpret the behavior of infants with visual impairments or multiple handicaps.

Ask: What do you think the caregiver could do in order to promote a positive interaction?

Instructor listens to responses and summarizes to include:

- Say the infant's name as you approach.
- Identify yourself to the infant (e.g., "Sally is here to play with you.").
- Talk to the infant and tell the child what you are doing prior to doing it (e.g., "I'm going to walk over to your crib and pick you up.").
- Imitate the infant's vocalizations.

Handout/ Overhead 12-2-2

Say: It is not difficult to help a visually impaired infant develop cognitive and language skills. Through careful interaction you can assist children in their development.

Instructor refers to **Handout/Overhead 12-2-2**.

Handout/ Overhead 12-2-3

Say: Now let's talk about some specific things we can do.

Instructor refers to **Handout/Overhead 12-2-3**.

Say: Language development of visually impaired children can be encouraged by:

- Naming and describing objects and events for the child with visual impairments.
- Using the senses of touch, smell, taste, and hearing to provide feedback in place of visual feedback. For example, we use a lot of body language when we communicate. When we communicate surprise, we lift our eyebrows and hold our hands up in the air. Children with visual impairments may not see these signals. However, they can hear the surprise in your voice. They can also place their hands on your hands as you raise them up in the air, so that they can associate the hand movements with the tone of voice which indicates surprise. Encourage the use of any remaining vision in these activities.
- Showing the child that we speak through our mouths by placing the child's fingers on your lips, throat, nose, and face as you talk.
- Pairing sound with touch whenever possible. If you are telling the child about a ticking clock, let the child feel the clock. Let the child touch people who are talking so that the child begins to make an association between voices and the people they represent.
- Using consistent language. For example, if there is more than one ball always call the red ball "red ball." Don't call it "ball" one day, "red ball" the next day, and "big ball" the day after.

Handout/ Overhead 12-2-4

There is another handout showing activities and adaptations to encourage cognitive development in the infant with visual impairments.

Instructor refers to and may review **Handout/Overhead 12-2-4**.

Ask: Are there any questions regarding cognitive and language development of infants with visual impairments?

5 minutes

LECTURE/DISCUSSION: Motor Development in the Infant with Visual Impairments

Say: Now, we will discuss the effects a visual impairment may have on the motor development of the infant.

When sighted children are developing motor skills they are able to:

- imitate motor skills they observe others doing
- practice motor skills in order to become more efficient at performing them
- observe their actions and modify their movements when necessary to successfully complete the task.

Say: For example, if a six-month-old watches the caregiver reach for and grasp a rattle, the infant can imitate this behavior. If the infant reaches for the rattle and misses, the infant is able to see the mistake. The infant can then modify actions so next time the rattle can be successfully grasped. Through repeated practice over a period of months, the infant can refine, or improve, ability to reach and grasp.

Infants with a severe visual impairment, total blindness, or a multiple handicap would be restricted in the ability to observe others' motor actions or to visually monitor and modify their own movements. Children with visual impairments are at a disadvantage for developing motor skills because of this limited ability to observe the environment.

When planning motor activities for the child with visual impairments or multiple handicaps the caregiver should consult with the child's parents,

physical therapists, occupational therapists, or orientation and mobility specialists.

10 minutes

ACTIVITY: Motor Activity Bag

Say: The following activity will help you understand how a visual impairment can affect the development of motor skills.

Instructor asks participants to work in pairs. One participant plays the infant and wears a blindfold or an occluder and the other participant plays the caregiver. Give each pair a motor activity bag. Instruct "caregivers" to read the motor activity sheet and follow the instructions with "infants" using the materials in the bag. Allow five minutes for participants to complete the activity.

Actvity 12-2-1a

Directions for preparing the motor activity bags are on **Activity 12-2-1a** in the Specific Information for Presenting Module 12 section of this manual.

Say: I would like each pair of the participants to very briefly describe the activity they were asked to complete.

Ask: Infants, how did it feel to be asked to complete the activity?

Caregivers, what adaptations could or did you make in order for the infant to meet with success in this activity?

Handout/ Overhead 12-2-5

Instructor allows time for participants to discuss their experiences.

Instructor refers to and discusses **Handout/Overhead 12-2-5**.

Say: Learning motor skills is not an easy task for any child, especially one who is visually or multiply impaired. When working with these children keep in mind:

- Provide plenty of opportunities for the baby to experience different positions (e.g., tummy, back, sitting).
- Encourage child to move as much as possible.

- Use hand-over-hand to demonstrate the motor movement for the baby taking the baby through the movement pattern but don't force a baby to move if the baby is not willing.
- Use sounds to encourage movement first at ear level and to the sides, and then above and below the baby's ear level.
- Encourage use of any remaining vision. For example, use large, brightly colored objects, or objects that move, sparkle, or give off light.

Say: The next handout provides suggested activities to help young children develop motor skills. Please remember that each child's development is unique. An activity or strategy that is successful with one child may not be successful with another child.

Handout/ Overhead 12-2-6

Instructor refers to and may review **Handout/Overhead 12-2-6**.

Say: Some of the activities described in the handout may assist the child with visual impairments in the development of motor skills.

Ask: Are there any questions regarding motor development of the infant with visual impairments?

5 minutes

LECTURE/DISCUSSION: Self-Help Development in the Infant with Visual Impairments

Say: Self-help activities include eating, dressing, toileting, and grooming. Infants and toddlers are not able to independently meet all of their self-help needs, but the roots for self-help independence are laid during the early years.

Ask: What are some of the eating skills an infant works to develop during the first year?

Instructor writes responses on the flipchart or chalkboard including:

- opens mouth for breast, bottle, or spoon
- reaches for bottle

- feeds self with fingers
- takes spoon filled with food to mouth
- holds and drinks from cup using two hands.

Handout/ Overhead 12-2-7

Say: A visual impairment will make learning these skills more challenging for an infant.

Instructor refers to **Handout/Overhead 12-2-7.**

Say: Simple adaptations for feeding an infant with visual impairments from a bottle include:

- hold the infant during feeding
- guide the infant's hands to the bottle to help hold the bottle
- guide the infant's hands to find the bottle if it is dropped
- use consistent language prior to giving the child the bottle and during the feeding
- describe what the infant is doing (e.g., "You're holding your bottle," or "The milk is cold.")
- hold and cuddle the infant.

Say: None of the above suggestions are difficult or time consuming to implement. The most important thing to remember when the child has a visual impairment or a multiple handicap is that the child is a child first. When helping the infant with visual impairments or multiple handicaps learn to drink from a cup or eat from a spoon (and later a fork) it is helpful to:

- use consistent language prior to and during the feeding
- encourage the infant to put the hand over your hand as you guide the cup or spoon to the infant's mouth

- use a verbal cue, such as "open," to tell the child the spoon or cup is approaching the mouth.

10 minutes **ACTIVITY: Fingerfeeding and Tactile Sensitivity**

Say: Fingerfeeding is another eating skill that infants work to develop. We are going to do a simulation activity that will enable you to experience fingerfeeding as an infant with visual impairments would.

Instructor asks participants to wear blindfolds or eye occluders and then places a small pile of food in front of each participant on the desk or table. Instructor tells participants to eat and scatters the food so that the participants must search for it. Instructor should use at least three foods of varying size and textures. Foods to use include:

- raisins
- sunflower or pumpkin seeds
- jello cubes
- chunks of fruit or vegetable
- cereal
- pretzels
- applesauce.

Say: Let's talk for a minute about how you felt during the fingerfeeding experience.

Instructor leads discussion asking questions such as:

- Was it difficult to locate the foods?
- Did all the foods feel the same?
- Did you feel nervous or hesitant about touching or eating a food you could not identify by touch?

As an alternative activity, the instructor can fast-feed one or more blindfolded participants using no verbal cues, wiping the person's mouth with a cold cloth and so on. Then ask participants to describe their feelings about the activity. Include feeling:

- surprised
- frustrated
- helpless
- angry
- cold.

Say: Many children with visual impairments and multiple handicaps are tactually defensive. Hopefully, the feeding experiences we just went through will make you more aware of tactile defensiveness reactions your children may display during feeding.

Ask: What is tactile defensiveness? How does tactile defensiveness affect the development of eating skills?

Instructor listens to responses and summarizes explaining that light touches tickle and cause the child to pull away. Children who are tactually defensive may find certain textures to be noxious because the child's sense of touch has not developed to the point of having meaning. These children may be fussy or uncooperative during feeding. Children may be very resistant to trying new textured foods. Children may become upset when the caregiver places the spoon or nipple near the mouth. A firm touch gives more information to the child.

Handout/ Overhead 12-2-8

If questioned the Instructor may suggest ways to deal with tactually defensive children. Instructor may want to refer to **Handout/Overhead 12-2-8**. For additional information on tactile defensiveness, instructor may refer to Hour 3 of *MITCH Module 10, Nutrition and Feeding Practices: What You Need to Know.*

Say: If a child is having trouble developing feeding skills talk with the child's parents or the center director concerning referring the infant for an evaluation by an occupational therapist, nutritionist, or speech-language pathologist.

As with eating, infants are not physically able to independently toilet, groom, or dress themselves. As caregivers we can help infants prepare for the time when they will be able to independently

accomplish these skills. When dressing or changing the infant, caregivers can:

- talk about and touch the infant's body parts (e.g., "I'm holding your foot. Now I will put a sock on your foot.")
- talk about the feel of different textured clothing against the body
- talk about the feel and smell of diapers against the body (e.g., wet, smelly).

Say: In helping the infant to develop self-help skills, be consistent, work slowly, and make these interactions positive. Infants spend a lot of time with caregivers as they eat, bathe, and are changed. Utilize these activities to the fullest.

Handout/ Overhead 12-2-9

Instructor refers to and may review **Handout/Overhead 12-2-9**.

5 minutes

LECTURE/DISCUSSION: Social-Emotional Development in the Infant with Visual Impairments

Say: All societies have rules that members must follow.

Ask: What are some rules in our society?

Instructor listens to responses and comments appropriately.

Instructor summarizes responses emphasizing that when we were each young we had to learn the rules of our society. Examples are eating with silverware, not stealing, and crossing the street when the light is green.

Say: Just as we had to learn the rules about our society, so do children with visual impairments and multiple handicaps. We learn many rules by observing others. Individuals with limited vision may require individualized instruction and time to learn social skills because they can't see what others are doing.

For the infant the first socializing agent is the mother or primary caregiver. A visual or multiple impairment can affect the infant's ability to bond

with or attach to the mother or primary caregiver. Key components of attachment are eye contact and smiling. Infants with severe visual impairments may not be able to make eye contact with the adult. The adult in turn may feel rejected. The start of smiling in infants with visual impairments is often delayed. If the mother or primary caregiver realizes this, then alternative methods for interacting with the infant can be developed.

Ask: Can you think of some alternate, or other, ways to interact with an infant with visual impairments who cannot see you smile?

Handout/ Overhead 12-2-10

Instructor refers to **Handout/Overhead 12-2-10** and leads discussion to include:

- touching and stroking the baby
- talking to the baby
- encouraging the baby to use the hands to explore facial features of the adult
- observing the baby's interaction cues (e.g., quieting, turning the head, stiffening, changing breathing pattern) and responding to these.

Say: Through close observation caregivers learn the unique communication style of the infant and can then change, or modify, their own communication styles to meet the needs of the infant with visual impairments.

Babies and young children are egocentric, which means that they do not realize that others have needs or feelings. In children's minds everything revolves around themselves. It is through social interaction with others that children learn that the world does not revolve around themselves. As caregivers of children with visual impairments or multiple handicaps, we must work to help the children learn first about themselves and then about others.

Many of the activities we have talked about during this hour help the child learn about the self. For example, when you say the child's name when approaching the child you are helping the child learn to distinguish the child's name from others' names. Describing the environment to the child, including different sounds, textures, smells, and visual stimuli, helps the infant learn that there is a world beyond the child.

Handout/ Overhead 12-2-11

Instructor refers to and may review **Handout/Overhead 12-2-11**.

Children with visual impairments and multiple handicaps sometimes have behaviors, or mannerisms, that are not socially acceptable, such as eye poking, twirling, and rocking. Normally developing children do not usually exhibit these same specific behaviors. Some children who are handicapped do not develop any mannerisms, while some children may develop more than one. A child may not display mannerisms during infancy, but it is important to be aware of what mannerisms are so that they can be stopped before they become habits.

Handout/ Overhead 12-2-12

Instructor refers to **Handout/Overhead 12-2-12** during the following discussion.

Say: It is believed that mannerisms may develop when a child is not stimulated by the environment and turns to the self for stimulation. That is why it is so important that caregivers provide a variety of stimulating experiences throughout the day for the infant.

Eye gouging or eye poking occurs when the child pushes the fingers, knuckles, or fist against the eye. It is thought that this behavior produces some type of visual sensation. To help a child decrease eye gouging behavior:

- redirect the child's hands to an appropriate activity (e.g., give the child a toy, sing a

song with the child that requires hand movements that you can help the child do)

- gently pull the child's hand(s) away from the eye(s) and firmly say "hands down" and then redirect the child to engage in appropriate play
- reward alternate behaviors.

Say: It is important that we do not encourage the child to use mannerisms as a means of getting attention. If the child only receives adult attention when engaging in inappropriate behavior, then the child is going to use the behavior to get the adult's attention. As caregivers, we must provide as much positive attention as possible when the child is engaging in appropriate behavior.

Another mannerism often exhibited by children with visual impairments and multiple handicaps is light flicking. This occurs when a child gazes at a light and waves the hand in front of the eye continually. The child is interested in the pattern created by the light and the shadow. To help decrease this behavior:

- change the position of the child
- turn off the light
- use visual stimulation activities.

Say: Rocking is the last mannerism we will talk about today. Children often rock in a forward to backward movement.

Handout/ Overhead 12-2-13

Instructor refers to and may review **Handout/Overhead 12-2-13**.

Say: When a child is exhibiting a mannerism people notice and think that the child is different or strange. By helping children with visual impairments and multiple handicaps develop socially acceptable behaviors we can decrease these negative reactions.

Ask: Are there any questions?

BEST COPY AVAILABLE

SUMMARY

Say: During this hour we have talked about the development of the infant with visual impairments. The different areas of development overlap. It is often hard to separate a motor skill from a cognitive skill. For example, when a child finds a toy hidden under a blanket, the child uses cognitive skill to understand that the object is under the blanket and uses motor skills to pull the blanket off the toy.

During infancy the seeds of later development are planted. By heightening our awareness and helping the infant explore the world we can nurture these seeds.

5 minutes **END OF HOUR TWO: Closing**

MODULE 12
Visual Impairments:
What You Need to Know

Hour 3

Goal: **PARTICIPANTS WILL GAIN KNOWLEDGE OF HOW A VISUAL IMPAIRMENT AFFECTS THE DEVELOPMENT OF THE TODDLER FROM 12 TO 36 MONTHS.**

OBJECTIVES - Participants will gain an understanding of:

- effects of a visual impairment on cognitive and language development of toddlers
- effects of a visual impairment on motor development of toddlers
- effects of a visual impairment on development of toddlers' self-help skills
- effects of a visual impairment on social-emotional development of toddlers
- adaptation of the caregiving environment to meet the needs of such toddlers.

5 minutes
(omit if 3-hour presentation)

GREETING, SIGN IN, AND DISTRIBUTION OF HANDOUTS

SESSION BEGINS

10 minutes

LECTURE/DISCUSSION: Cognitive and Language Development in the Visually Impaired Toddler

Say: In Hour 2 of this module we talked about developmental sequences and milestones of infants. Toddlers continue to develop skills in a sequential order as they did in infancy. As a general rule, children with visual impairments can do all the activities that other children in the caregiving setting can do. The main difference is that activities may need to be adapted, or modified, in order for the child with visual impairments to be successful with the activity. Toddlers with visual impairments often need additional encouragement to explore their environment. They may need your explanation to understand things that other children learn visually.

During this hour you will learn many strategies to use with toddlers with visual impairments.

Cognitive training and language development dominate the toddler years. Toddlers are exploring their environment, trying new activities, and learning to use language to communicate with others about their ever-expanding world. Toddlers who are visually impaired may lag developmentally behind their sighted peers, because they do not receive accurate, visual feedback. A story illustrates what an important role vision plays in providing feedback about the environment.

Three blind men were discussing an elephant. The first man stood at the trunk of the elephant and described the elephant as being long and hollow with a hole at one end which blew warm air and

made a loud trumpeting noise. The second man stood at the side of the elephant and described it as being very large, flat, and smooth. The third man touched the tail of the elephant and said that it was small and thin, like a garden snake. Each of these men had only a partial picture of the elephant. None had any idea of what size the elephant was or how the parts of the elephant related to make a whole.

This story may sound silly, but in reality it is not very different from ideas, or perceptions, that young children with visual impairments have. It is important that we, as the child's caregivers, provide information that will enable the child to accurately, or correctly, interpret the environment. Let's talk more about how to do this.

Ask: What different forms can an egg take?

Instructor lists responses on flipchart or chalkboard to include:

- in the shell
- liquid (when you break it into a bowl)
- scrambled
- over easy
- sunny side up
- poached
- soft boiled.

Say: A child with visual impairments who eats a scrambled egg two mornings a week, but has no other contact during the week with eggs, will not realize that scrambled eggs start out in a shell, are broken into a bowl, mixed with a fork, poured into a hot pan, and then cooked. This child will not be familiar with any other forms of eggs.

As caregivers, we can plan activities to help children with visual impairments gain this type of knowledge. Children with visual impairments often

assume that things "magically" happen. They are not able to see all the parts which create a whole. If, every day after lunch, the child is handed a toothbrush with toothpaste already on it, the child will assume all toothbrushes come with toothpaste.

Handout/ Overhead 12-3-1

Say: Let's look at all of the steps involved in toothbrushing.

Instructor reviews **Handout/Overhead 12-3-1**.

Say: It is often helpful to think about each small step in a specific activity as you see here.

Ask: Looking over this list, what steps do you think might be particularly challenging to a child who is blind or visually impaired?

Instructor writes the responses on a flipchart or chalkboard and leads discussion to include skills such as:

- squeezing the toothpaste onto the bristles of the toothbrush
- locating the cold water tap
- placing the toothbrush bristles under the running water.

Ask: How can you adapt the activity or help the child to be more successful in these tasks?

Instructor leads discussion to include:

- encourage the child to hold the toothbrush close to the bristles so that the child's fingertips can feel that the toothpaste is going onto the bristles
- teach the child to always use the cold water faucet by placing all material on that side of the sink
- help the child use one hand to find the running water and then bring the toothbrush over to meet that hand under the water.

Say: Let's talk now about the language development of toddlers with visual impairments. People who study the language of these children have found that they often have words in their vocabularies, but do not understand the concept behind the words. The child can say, "brush teeth," but does not

truly understand what brushing the teeth involves. To help reduce this problem:

- use real objects (e.g., an actual egg instead of a plastic egg)
- describe the environment to the child
- provide a wide variety of experiences with different objects representing the same category (e.g., using more than one toothbrush, or brushing a doll's teeth; walking along different routes to get from the classroom to the playground)
- allow the child to touch objects whenever possible
- allow the child to experience other brushing activities.

Say: Children with visual impairments sometimes repeat words without understanding their full meaning. Sometimes the child parrots what you say. If for example you said, "Time for lunch," the child may repeat, "Time for lunch." Sometimes the child may not repeat you right away. Later on, often when it is inappropriate, the child will repeat something previously heard. Perhaps an hour after lunch is over when you are reading a story the child with visual impairments may repeat, "Time for lunch." Some children may repeat words to songs or information they hear on the television, such as commercial jingles. Some children will repeat one phrase over and over, because they like the way it sounds.

All children occasionally repeat words and this behavior helps them practice language they hear. However, if a child continually does this then you should become concerned. The handout discusses strategies to use with children who repeat inappropriately.

Handout/ Overhead 12-3-2

Instructor discusses **Handout/Overhead 12-3-2.**

10 minutes

Activity 12-3-1a

ACTIVITY: Story Time

Instructor will need to make the book *Kitchen Helper* prior to presenting Hour 3 of this module. Instructions for preparing the book are given in **Activity 12-3-1a**.

Instructor divides participants into three groups. One group should wear occluders or blindfolds over both eyes, one group should patch one eye with gauze, and the third group should remain normally sighted.

Explain to participants that they are now two-and-a-half years old and are involved in a storytime activity in their caregiving center. Instructor reads story without using props or elaborating on content. To show children pictures, instructor holds up book and moves it from left to right.

After reading the story explain that during the second reading of the same story you will demonstrate methods for adapting the story for a child with visual impairments. During the second reading of the story instructor should:

- have participants move closer so they can see
- elaborate on content of story
- show pictures close up to children with low vision
- use participant's name when talking to or showing an object to that individual
- describe the pictures for those participants who cannot see
- pass around and describe actual items for participants to feel and use.

It is not necessary to avoid words like "look" and "see".

Ask: Do you think a visually impaired child would get more from this activity during the first or second reading? Why?

Answer - second reading. Instructor listens to responses and comments appropriately.

Ask: What things did I, as the caregiver, do differently during the second reading of the story?

Instructor writes responses on flipchart or chalkboard. Include the information listed above.

5 minutes

LECTURE/DISCUSSION: Cognitive and Language Development, Continued

Say: Researchers have learned that children who are visually impaired or blind often have trouble learning spatial concepts. Spatial concepts are words we use to tell how the location of one object relates to the location of another object. For example, I can put the book ON the chair.

Instructor stresses "on" in the previous sentence and demonstrates by placing the MITCH instructor manual on a chair.

Ask: What other spatial concepts can you think of?

Instructor writes list on chalkboard or flipchart to include:

in	out
up	down
over	under
big	little
top	bottom
tall	short
above	below.

Say: In order to assist children with visual impairments in learning spatial concepts, provide hands-on experience. For example, let's take the concept "down". How could you work on this concept during activities at your caregiving center?

Instructor writes responses on flipchart or chalkboard to include:

- sliding down the slide
- getting down off of the changing table after a diaper change
- singing songs about up and down and doing the motions to the words
- putting a toy down when the child is done playing with it.

Say: Understanding spatial concepts, or where objects are located in space, is an important cognitive and intellectual concept for two reasons.

First, when using orientation and mobility skills, the child must have an understand how objects and places in the environment relate to each other. For example, if the child asks for crayons you may respond, "Crayons are in the box on top of the art table." The child must use orientation and mobility skills to find the table, locate the box on the table, and find the crayons in the box.

An understanding of spatial concepts is also important for the development of reading skills. Whether beginning to read braille or print, the child must learn to locate the top, bottom, left, and right of a page. The child must also be able to locate the front and back of a book and turn pages. It may seem that we are jumping ahead by discussing reading, but most toddlers enjoy being read to and will often pretend to read to others. These are important skills to have prior to actually learning to read.

Ask: Does anyone know what braille is?

Say: Braille is a system of raised dots that represent words. For each letter of the alphabet there are one to six dots arranged in a specific pattern. These braille letters are put together to represent words. Dots can be combined in specific ways to represent frequently used groups of letters such as:

- ment
- ing
- th
- com.

The dots can also be combined to represent frequently used words, so that they do not need to be spelled out each time. For example:

- and
- the

- there
- father.

Say: We do not expect preschool children to read, but children should develop an awareness that the print or braille they see in a book represent words that communicate a message. Sighted children continually observe adults reading, but severely visually impaired or blind children don't know that adults are reading. Caregivers can help children become aware of words by:

- placing brailled, regular size print, or large print labels on the child's belongings and objects the child commonly uses
- reading aloud to the child from printed material in the everyday environment so that the child realizes there are written words surrounding us.

Instructor discusses special books available in both braille and large print. Refer to resource list.

Say: Encouragement of cognitive and language development is ongoing. Within the caregiving setting, provide a wide variety of experiences and help the child sort out the important pieces of information from each experience. The handouts provide suggestions of activities and materials that can help in the development of cognitive and language skills.

Handout/ Overhead 12-3-3, 12-3-4 & 12-2-2

Instructor refers to and may review **Handouts/Overheads 12-3-3**, **12-3-4** and **12-2-2**.

10 minutes

LECTURE/DISCUSSION: Motor Development in the Toddler with Visual Impairments

Say: During the toddler years children develop further independence in motor skills. The understanding of object permanence, that is, realizing that an object still exists even if the child is not in visual or physical contact with it, aids in the

development of motor skills. When the child realizes that the object still exists, the child will be more willing to seek it out.

Helping children with visual impairments develop and refine motor skills is important for planning activities in the caregiving setting. Activities that promote movement exploration are essential for toddlers with visual impairments. Examples of these activities include:

- doing obstacle courses
- using playground equipment
- developing eye-hand coordination through playing with a variety of balls (balls with bells are useful)
- practicing balance (e.g., trampolines, balance boards)
- providing push toys and large riding toys
- allowing freedom to explore.

Say: Children with visual impairments must learn to utilize cues when traveling in their environment. Cues come in many forms. Smells, textures, or sounds all can be cues.

Ask: If you were blind and were magically transported from this room to the center of your kitchen, how would you know you were in your kitchen?

Instructor listens to responses:

- sound of refrigerator
- sound of clock ticking
- feel of the floor
- feel of the counter, stove, refrigerator, etc.
- smell of food
- feel of the warmth from the sunlight coming in through a window or door.

Say: As caregivers we must help children with visual impairments recognize cues in the caregiving center so that they can travel more independently from place to place. We must give children a reason to want to move. For example, place a noisemaking toy across the room for the child to find. Children don't just move and explore for the sake of moving and exploring. They need encouragement and motivation.

There are many children with visual impairments who find stairs difficult to manage. Some children have visual impairments that affect their depth perception, or ability to judge distance. These children have a distorted, or unclear, perception of how far down it is from one step to the next. Within the caregiving setting, provide children with visual impairments with opportunities to go up and down stairs. The child may be only willing to use the stairs while you hold onto one or both of the child's hands. As soon as possible teach the child to hold onto the railing. As with all other activities make going up and down stairs meaningful. Have a favorite toy waiting at the top of the stairs or give the child a big hug when the child reaches the bottom of the stairs.

Handout/ Overhead 12-3-5

Instructor refers to **Handout/Overhead 12-3-5**.

Say: The next handout provides suggestions of gross motor activities that you can incorporate into the program at your caregiving setting.

Some children who are visually impaired or blind develop irregularities in their gross motor movements. These differences are the child's way of trying to compensate, or make up for, limited visual information about the environment. Examples of irregular movement patterns include:

- Waddle Walk - The child walks with the feet wide apart, legs straight, and weight shifted from one foot to the other. This posture

provides the child with a wider base of support, so that it is easier for the child to balance.

- Decrease in shoulder elevation - This head position may occur in children with no vision. The head is bent down to chest. Due to lack of stimulation and lessened head movement, weakened neck muscles may have resulted.

- W-sitting - This position is often used by children who have poor muscle trunk control and abnormal muscle tone. The child sits on buttocks, legs bent on either side with feet beside buttocks. The child uses this position to get better control when sitting.

Say: As a general rule all abnormal postures, or positions, should be discouraged. If you see a child frequently take a position that looks uncomfortable, or abnormal, talk to the child's parents or your center director about referring the child to a physical therapist.

So far in this section we have talked about gross motor or large muscle skills. A second part of motor development is fine motor, or small muscle skills. During infancy children acquire the basic skills of reaching, grasping, releasing, and rotating the wrist. During the toddler years the child practices and refines these skills. The development and refinement of eye-hand coordination is important during the toddler years.

Toddlers with visual impairments will have poor or no visual feedback for developing these skills. Also, the toddler's ability to observe others performing fine motor skills may be severely limited. Therefore, it may be necessary for you to teach these skills hand-over-hand.

Ask: What are some activities that toddlers do to develop fine motor skills?

Instructor writes on flipchart or chalkboard to include:

- eating fingerfoods
- putting pegs in pegboards
- completing puzzles
- screwing and unscrewing jar lids
- stringing beads.

Handout/ Overhead 12-3-6

Instructor refers to and may discuss **Handout/Overhead 12-3-6**.

5 minutes

LECTURE/DISCUSSION: Self-Help Development in the Toddler with Visual Impairments

Say: Helping the child develop independence in eating, toileting, dressing, and grooming is important during the toddler years. Often it is faster for the caregiver to dress the child, but all children must learn to do these things for themselves. Children are able to take clothes off more easily than they are able to put them on, so start by working with undressing first. Even before children display independent dressing skills they can assist the caregiver. For example, the caregiver can untie and loosen the child's sneaker, and then the child can pull it off. Over time, the caregiver can teach the child to loosen and untie the sneaker, so that the child is able to remove the sneaker independently.

Dressing is an excellent time for visually impaired children to work at developing an understanding of body parts. When helping children dress have them feel, point to, or name body parts with you or by themselves. Talk about textures and colors of different clothing articles. Spatial concepts that we discussed earlier are also incorporated into dressing.

Ask: What concepts are practiced during dressing?

Instructor leads discussion to include:

- taking shirt off
- zipping up zipper
- pulling down pants
- pulling sweater over the head
- wearing socks inside of shoes.

Say: When teaching self-help skills such as dressing, it is best to help the child with these skills when they would naturally occur. In some caregiving centers, times are set aside for dressing just as for block play or storytime, but this type of scheduling is not normal and meaningful for children. Dressing skills should be worked on at normal dressing times such as before and after naps, going swimming, or playing outside. Eating skills should be worked on during meal and snack times. Take this into consideration when planning a schedule for your caregiving center.

Ask: What times during the day can you help children learn dressing skills?

Instructor writes responses on chalkboard or flipchart to include:

- arrival
- departure
- toileting
- swimming
- art time
- nap time.

Say: In *MITCH Module 10, "Nutrition and Feeding Practices: What You Need to Know,"* there is information about scheduling mealtimes and planning menus. When working with children with visual impairments remember that it is important for children to learn where food comes from, and

all the different forms that food can take. Plan activities that give children these opportunities.

Young children observe others eating and imitate these behaviors. A child who is severely visually impaired cannot accurately see another person eating. This child will need patient, hand-over-hand instruction to learn socially acceptable eating skills. Realize that there will be a mess, and prepare for this by covering the floor with plastic or similar material. Have lots of towels and bibs available.

5 minutes

LECTURE/DISCUSSION: Social-Emotional Development in the Visually Impaired Toddler

Say: It is often noticeable that some children who are visually impaired are not as responsive as sighted children in social situations where they are with other people. Obvious behavioral differences may include decreased:

- gestures such as smiling, eye contact, or turning toward the person who is speaking
- interaction with adults such as calling to get attention or pulling the adult over to show something
- interaction with peers
- appropriate independent play with toys.

As discussed in Hour 2 of this module, the child who is visually impaired often misses out on important visual cues and gestures from adults and other children. The child who does not see the happy face or excited smile of an adult may not be as inclined to turn to look at an adult for approval or to fully face the person who is talking. These subtle social behaviors will need to be continually prompted both verbally and physically in order for them to become a natural response in the child's repertoire.

Instructor refers to **Handout/Overhead 12-2-11** used in Hour 2

Handout/ Overhead 12-2-11

Ask: What are additional prompts you can give the toddler to encourage orientation towards you such as looking, turning, etc.?

Instructor leads discussion to include:

- physical prompts on chin/cheek to direct child's face towards you
- gently hold child's hands or sides so child is facing you
- directly ask the child to turn and face you.

Say: If a child sees you better with a turned head, you would, of course, help the child assume that position rather than have the child face you.

When a child with a visual impairment uses appropriate social behaviors, the child's sighted peers will more naturally interact with the visually impaired child. This will be very important when the child enters a preschool or participates in a play group with both sighted and non-sighted peers.

Ask: What kinds of play situations do you think could promote children to be more aware of each other and to play together?

Instructor writes on a flipchart or chalkboard and leads the discussion to include:

- having children play within close proximity of each other
  - in a small play area
  - in a sand box
  - around a water table
- having children play with the same toy/material
  - fingerpaint on same piece of paper
  - turn taking or reciprocal games
  - ball games
  - imaginary sink, stove, etc.

Handout/ Overhead 12-3-7

Instructor refers to and may review **Handout/Overhead 12-3-7**.

Ask: Are there any questions regarding social emotional development of visually impaired toddlers?

5 minutes

LECTURE/DISCUSSION: Adapting the Caregiving Environment

Say: We have discussed earlier in this session different ways you can help motivate a child to move from one place to another independently.

Instructor briefly reviews if necessary:

- teaching the child spatial concepts
- using toys as motivators
- playing with push toys or riding toys
- using various sensory input such as sounds, smells, lighting.

Say: There are many other environmental factors you should consider when setting up a room for visually impaired children. How you adapt the environment will depend on the child's visual diagnosis and its implications. Some children may be photophobic, or sensitive to light. Therefore the lighting in the room may need to be subtle and not from bright lamps or overhead lights or direct sun. Still other children may relate better to objects which are lighted or placed on lighted backgrounds.

Most children with visual impairments can benefit from additional textured cues which help define specific areas within a room and throughout the floor or building. Cues such as different floor surfaces (rug, tile, wood, mat, etc.) can alert the child to which room is being entered.

Handout/ Overhead 12-3-8

Instructor discusses and reviews **Handout/Overhead 12-3-8.**

If there is time, instructor invites participants to wear occluders or blindfolds and walk around, paying specific attention to environmental cues. Use a buddy system for safety.

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Ask: What cues did you appreciate and use? What cues do you wish were available?

Say: In this final hour you have been given an overall picture of the developmental skills and needs of the toddler who is visually impaired. You have experienced and hopefully gained insights into how such toddlers receive and perceive information in the environment and from people. Please hold on to the handouts for times when you may need a quick review, an idea, or reference.

Ask: Are there any last minute questions or thoughts?

5 minutes

Explanation of Six-Week Follow-Up Activity

Give participants the phone number at which you can be reached should there be any questions regarding the follow-up activity.

END OF HOUR 3: Closing

Resource List

Integrating Available Curriculum

Look at Me: A Resource Manual for the Development of Residual Vision in Multiply Impaired Children. Smith, Audrey, & Cote, Karen Shane (1982). Philadelphia: Pensylvania College of Optometry Press. This book provides basic information on the structure and funciton of the eye. The text uses a case study approach to sensory integration activities. Chapters VI and VII provide a step-by-step sequence of functional vision evaluation and stiumulation activities. This text was designed to be used at the pre-service and in-service level for teachers of the visually impaired.

Preschool Vision Stimulation: It's More Than a Flashlight: Developmental Perspective for Visually and Multihandicapped Infants and Preschoolers. Harrell, Lois, & Akesori, Nancy (1987). This text is designed for the educator as well as the parent and is divided into several sections. The first section, "Implication of Visual Impairment on Early Development," describes basic child development from birth to four years, visual assessment, common eye disorders and step-by-step chart of visual development with low vision activities. The second portion of the book discusses special needs of thelow vision child with specific activities and related resources.

Alive...Aware....A Person: A Developmental Model for Early Childhood Services. O'Brien, Rosemary (1976). Rockville, MD: Montgomery County Public Schools. Many visually impaired children do not acquire the basic skills necessary to function in school. A critical need exists to design self-image and to develop attitudes and skills to enable young visually impaired children to later choose an appropriate vocation. This text contains reviews of literature on early intervention, a language development intervention curriculum, motor development curriculum and sensory/perceptual development curriculum including specific vision training and vision stimulation activities.

"Infancy & Early Childhood." Ferrell, Kay Alicyn (1986). In Foundation of Education for Blind & Visually Handicapped Children & Youth. New York: American Foundation for the Blind. This chapter discusses Federal involvement in early education, efficacy of early education, developmental norms for visually handicapped children, curricular concerns for visually impaired children and unique developmental needs and strategies for working with visually impaired children.

Reach Out & Teach: Meeting the Training Needs of Parents of Visually & Multiply Handicapped Young Children. Ferrell, Kay Alicyn (1986). New York: American Foundation for the Blind. This is a two part handbook and reach book for parents and educators. The reachbook offers parents an indepth record-keeping system to measure their child's growth and development (gross and fine motor), daily living and communication skills, sensory development and cognitive development.

The Oregon Project for Visually Impaired & Blind Preschool Children. (1986). Brown, Dounise, et al. Medford, OR: Jackson Education Service District. The purpose of the Oregon Project is to provide assessment and curriculum to educators of young children with visual deficits in six developmental areas consisting of 700 behavioral statements.

1. **Cognitive** - contains skills that require reasoning and thinking related to pre-academics.
2. **Language** - simple accurate language needs to be paired with the real object or experience.
3. **Self-Help** - contains skills for feeding, dressing, toileting and grooming.
4. **Socialization** - interaction with other young children.
5. **Fine Motor** - contains skills requiring small muscle activities including grasping and eating.
6. **Gross Motor** - contains skills requiring large muscle activities including crawling and walking.

Portage Guide to Early Education. Bluma, Susan (1976). Portage, WI: Cooperative Educational Service Agency #120. Provides a curriculum for children ages birth to five years in the six areas: a) infant stimulation, b) socialization, c) language, d) self-help, e) cognitive, and f) motor. It provides information on planning and implementing curriculum goals. It comes with a comprehensive card file of specific developmental activities in each curriculum area. A checklist is also included to enable on-going recording of the child's development.

Pre-Feeding Skills: A Comprehensive Resource for Feeding Development. Evans Morris, Suzane, & Dunnklein, Marsha (1987). Tucson, AZ: Therapy Skill Builders. This reference book begins with the first chapter on the normal development of pre-feeding skills. Subsequent chapters focus on oral feeding disorders including assessments, issues (environment, positioning, nutrition, etc.), and treatments. It has a short chapter on pre-feeding issues and blindness. There are also a variety of participation activities which enable the reader to actively experience certain pre-feeding concepts.

Guidelines and Games for Teaching Efficient Braille Reading. Olson, Myrna R. (1981). New York, NY: American Foundation for the Blind. This book has a chapter titled "Pre-School Experiences Important to Braille Reading Readiness." It focuses on pre-requisite skills for braille and suggests activities for these pre-braille skills. It covers three major areas: a) sensory motor development, b) concept development, and c) reading awareness. Another chapter provides activities for building skills needed for braille reading.

Resource List of Agencies

American Foundation for the Blind
15 West 16th Street
New York, NY 10011

Blind Children's Center
4120 Marathon St.
P.O. Box 29159
Los Angeles, CA 90029-0159
(213) 664-2153

Florida Instructional Materials Center for the Visually Handicapped
Ms. Suzanne Dalton, Supervisor
5002 N. Lois Avenue
Tampa, FL 33614
1-(800)-282-9193

Hadley School for the Blind
700 Elm Street
Winnetka, IL 60093
(312) 446-8111

The Jewish Guild for the Blind
15 West 65th Street
New York, NY 10023

Library of Congress, Library for the Blind and Physically Handicapped
The New York Public Library
166 Avenue of the Americas
New York, NY 10013

New York Association for the Blind
111 East 59th Street
New York, NY 10022

New York State Resource Center for the Visually Impaired
NYS Education Department/Office for Education of Children with
Handicapping Conditions
Richmond Avenue
Batavia, NY 14020

References

Alpern, G.D., & Boll, T.J. (1972). *Developmental profile.* Indianapolis, IN: Psychological Development Publications.

Baldwin, V., Fredricks, H.D. & Grodsky, G. (1973). *Isn't it time he outgrew this?* Springfield, IL: Charles C. Thomas.

Barraga, N.C. (1983). *Visual handicaps and learning* (Rev. ed.). Austin, TX: Exceptional Resources.

Becker, W.C. (1971). *Parents are teachers.* Champaign, IL: Research Press.

Beery, K.E., & Buktenica, N.A. (1967). *Developmental Test of Visual-Motor Integration.* Chicago: Follett Education Corporation.

Bluma S., et al. (1976). *Portage Guide to Early Education.* Portage, WI: Portage Project.

Bortner Moore, S. (1984). *A home-based media approach for developing critical skills in young visually impaired children.* (ED 248 622) (Final Report). Louisville, KY: American Printing House for the Blind.

Brothers, R.J., & Huff, R. (1975). *Sound localization: Suggested activities for the development of sound localization skills.* Louisville, KY: American Printing House for the Blind.

Brown, D., Simmons, V., & Methvin, J. (1986). *The Oregon Project for Visually Impaired and Blind Preschool Children* (3rd ed.). Medford, OR: Jackson Education for the Blind.

Brown, D.E. (1979). One step at a time: Independence and self-help for the young child. In *Proceedings of the North American Conference on Visually Handicapped Infants and preschool Children, Minneapolis, May 1978.* New York: American Foundation for the Blind.

Cohen, J. (1966). The effects of blindness on children's development. In *The New Outlook For The Blind, 60* (pp. 150-154).

Cohen, Lieberman, Stolzberg, & Ritty (1983). The NYSO vision screening battery: A total approach. *Journal of American Optometric Association, 54* (11) (pp. 979-984).

Cratty, B.J. (1971). *Movement and spatial awareness in blind children and youth.* Springfield, IL: Charles C. Thomas.

Croft, N.B., & Robinson, L.W. (1975). *Project Vision-Up.* Gooding, ID: Idaho State School for the Deaf and the Blind.

Cutsforth, T.D. (1951). *The blind in school and society: A psychological study.* New edition. New York: American Foundation for the Blind.

DeMott, R.M. (1982). Visual Impairments. In N.G. Having (Ed.), *Exceptional children and youth*. Columbus, Ohio: Merrill Publishing Company.

Dorf, M.B., & Senarry, C.W. (1971). *Instruction manual for braille transcribing*. Washington, D.C.: Division for the Blind and Physically Handicapped, Library of Congress.

Erin, J. (1989). *Selected papers*. New York: American Foundation for the Blind.

Ferrell, K.A. (1986). Infancy and early childhood. In G.T. Scholl (Ed.), *Foundations of education for blind and visually-handicapped children and youth*. New York: American Foundation for the Blind.

Ferrell, K.A. (1986). *Reach out and teach*. New York: American Foundation for the Blind.

Fieber, N.M. (1977). *Sensorimotor Cognitive Assessment and Curriculum for the Multihandicapped Child* (ED 235 655*).

Papers in Developmental Disabilities. Omaha, NA: Nebraska University Medical Center, Meyer Children's Rehabilitation Institute.

(1974). *When the sensory handicapped child has cerebral palsy: Part I, physical management and part II, deaf-blind curriculum and the child with cerebral palsy* (ED 235 654*). Omaha, NA: Working Papers in Developmental Disabilities, Nebraska University Medical Center, Meyer Children's Rehabilitation Institute.

Frailberg, S. (1977). *Insights from the blind*. Troy, Missouri: Harper & Row.

Furuno, S., et al. (1979). *Hawaii Early Learning Profile (HELP) and HELP Activity Guide*. Palo Alto: VORT Corporation.

Geruschat, D.R. (1980). Functional implications of common pathologies of the eye. In K.M. Cook (Ed.), *A resource manual for the development and evaluation of special programs for exceptional students, Volume V-E: Project IVEY: Increasing Visual Efficiency*. Tallahassee, FL: Florida Department of Education.

Harrell, L., & Akeson, N. (1987). *Preschool vision stimulation: It's more than a hashlight*. New York: American Foundation for the Blind.

"From crib to kindergarten: A continuum of needs of the visually impaired preschooler". 1983. (ED 249 696*).

"The visually impaired preschooler with an emphasis on medical intervention". 1983. (ED 249 698*).

Harrell, L. (1977). Developmental levels and suggested learning activities for the visually impaired preschool child. (A Special Report). (ED 249 699).

Hazekamp, J., & Huebner, K.M. (Eds.). (1989). *Program planning and evaluation for blind and visually impaired students*. New York: American Foundation for the Blind.

Hull, W. (1977). Position Paper: Parental involvement in education of preschool blind children. Third International Seminar on Preschool Visually Handicapped. Lansing, Michigan.

Hull, W., & Ross, M. (1979). The parent-teacher relationship in preschool programs. *Journal of Visual Impairment and Blindness, 73*, (3), 102-105.

Jastrzemska, Z.S. (1982). *Model for a workshop on assessment of blind and visually impaired students.* New York: American Foundation for the Blind.

Johnson, N.M., Jens, K.G., & Attermeier, S.M. (1986). *Carolina Curriculum for Handicapped Infants.* Baltimore: Paul H. Brookes.

Kastein, S., Spaulding, I., & Scharf, B. (1990). *Raising the young blind child: A guide for parents and educators.* New York: Human Sciences Press, Inc.

Klein, M.D. (1983). *Pre-dressing skills.* Tucson, AZ: Communication Skill Builders.

Lowenfeld, B. (1971). *Our Blind Children* (3rd ed.). Springfield, IL: Charles C. Thomas.

Psychological problems of children with impaired vision. In William M. Cruickshank *Psychology of exceptional children and youth* (3rd ed). Englewood Cliffs, NJ: Prentice-Hall.

Mager, R.F. (1962). *Preparing instructional objectives.* Palo Alto, CA: Fearon Publishers, Inc.

Mangold, S. (1977). *The Mangold Developmental Program of Tactile Perception and Braille Recognition* (Rev. ed.). Castro Valley, CA: Exceptional Teaching Aids.

Maxfield, K., & Buchholz, S. (1957). *A social maturity scale for blind pre-school children: A guide to its use.* New York: American Foundation for the Blind, Inc.

Moore, S. (1985). *Beginnings: A practical guide for parents and teachers of visually-impaired babies.* Louisville, KY: American Printing House for the Blind.

Morris, S.E., & Klein, M.D. (1987). *Pre-feeding skills.* Tucson, AZ: Therapy Skill Builders.

Neisworth, J.T., & Bagnato, S.J. (1986). Curriculum-based developmental assessment: Congruence of testing and teaching. *School Psychology Review*, (2) 180-190.

O'Brien, R. (Ed.). (1976). *Alive...aware...a person: A developmental model for early childhood services.* Rockville, MD: Montgomery County Public Schools.

Overbook School for the Blind. (1989). *Parent early childhood education series.* Philadelphia: Overbook School for the Blind.

Parents Guide to the Development of Preschool Handicapped Children: Resources and Services (1984). Reference Circular No. 84-5. Washington D.C.: Library of Congress, Division for the Blind and Physically Handicapped. (ED 253 015*)

Przbocki, M., & Miller, S.A. (eds). *Toys for special children.* November, 1984. (EDO 253 041*)

Raynor, S., & Drouillard, R. (1975). *Get a wiggle on.* Mason, MI: Ingham Intermediate School District. (1977).

Move It. Mason, MI: Ingham Intermediate School District.

Robinson, G.A. (1975). Best practices in assessment of visually handicapped students. In Alex Thomas and Jeff Grimes (Eds). *Best Practices in School Psychology.* Kent, Ohio: National Association of School Psychology.

Rogers, S.L., & Puchalski, C.B. (1986). Social smiles of visually impaired infants. *Journal of Visual Impairment and Blindness, 80*(7), 863-865.

Rogow, S.M. (1984). Intervention, interaction and language development in blind and visually impaired developmentally delayed young children. (ED 246 628*)

Scholl, G.T. (Ed.). (1986). *Foundations of education for blind and visually handicapped children and youth.* New York, NY: American Foundation for the Blind.

Scott, E.P., Jan, J.E., & Freeman, R.D. (1977). *Can't your child see?* Baltimore: University Park Press.

Shane, K., & Smith, A. (1979). *Vision stimulation.* Unpublished manuscript. Upsal Day School for the Blind, Philadelphia.

Smith, A.J., & Cote, K.S. (1982). *Look at me: A resource manual for the development of residual vision in multiply impaired children.* Philadelphia: Pennsylvania College of Optometry Press.

Stein, H.A., Slatt, B.J., & Stein, R.M. (1987). *Ophthalmic terminology: Speller and vocabulary builder* (2nd ed.). St. Louis: C. V. Mosby Company.

Touch and Tell. Vols. I-III. American Printing House for the Blind, Louisville, 1971.

Trief E., Duckman R., Morse, A., & Silberman, R.K. (1989). Retinopathy of prematurity. *Journal of Visual Impairment and Blindness.*

Appendix A

Reproducible Forms for Three-Hour Module

Form	Copies to make
• Instructor's Time Table and Notes (2 pages)	• 1 per instructor
• Advertising Flier	• As needed
• List of Participants	• Varies - usually 6 to 8
• Follow-Up Mailer (2 pages)	• One per participant

Note: Reproduce mailer as one two-sided page by photocopying the second page on the reverse side of the first. This mailer may be reproduced on agency letterhead.

• Certificate of Completion (1 page)	• 1 per participant

Instructor's Time Table and Notes

MITCH Module Title: _____

Training Location _____

Date_____

Instructor _____

Preparation

Date	Task	Completed
_____	Review module	_____
_____	Preview videotape* and audiotape	_____
_____	Arrange for guest speaker*	_____
_____	Set date	_____
_____	Arrange for room	_____
_____	Arrange for A-V equipment*	_____
_____	Advertise	_____
_____	Photocopy all handouts	_____
_____	Prepare any overheads	_____
_____	Collect additional materials	_____

Notes for Training
Hour 1:

Hour 2:

*** if applicable**

Trainer's Time Table and Notes, continued
Hour 3:

Six-Week Follow-Up Activity

Date	Task	Completed
_____	Copy letters	_____
_____	Send letters	_____
_____	Collect activity	_____
_____	Review activity	_____
_____	Copy certificate	_____
_____	Prepare certificate	_____
_____	Deliver certificate	_____
_____	Record trainees who have completed module	_____
_____	Maintain List of Participants on file	_____

Notes:

Coming . . . MITCH Module 12

TRAINING FOR CAREGIVERS OF INFANTS AND TODDLERS

Date ..... **Time** .....

Location .....

Training Agency .....

For information and/or registration, call .....

.....

.....

LIST OF PARTICIPANTS

SIGN IN SHEET
MITCH Module

MITCH module title _____

Training date _____

Training location _____

Instructor _____

Hours Attended			
1st	2nd	3rd	*FA

Please PRINT your name, social security number, home mailing address, phone and place of work.

Full Name _____ Social Security _____

Home Address _____

City _____ State _____ Zip _____

Phone _____ Place of Work _____

Work Address _____ Zip _____

Full Name _____ Social Security _____

Home Address _____

City _____ State _____ Zip _____

Phone _____ Place of Work _____

Work Address _____ Zip _____

Full Name _____ Social Security _____

Home Address _____

City _____ State _____ Zip _____

Phone _____ Place of Work _____

Work Address _____ Zip _____

Full Name _____ Social Security _____

Home Address _____

City _____ State _____ Zip _____

Phone _____ Place of Work _____

Work Address _____ Zip _____

*** Follow-Up Activity completed**

Dear

This is to remind you that the Six-Week Follow-Up Activity for MITCH Training Module # _____

Title: _____

is due _____/ _____/ _____.

Please submit your Follow-Up Activity to:

_____

_____

_____

_____

If you have any questions, please call:

_____ *telephone* _____.

Sincerely,

Staple

Fold #2

From: MITCH Module Training

To:

Fold #1

Certificate of Completion

MITCH

Model of Interdisciplinary Training for Children with Handicaps

_____

has completed all requirements for MITCH Module 12, entitled:

VISUAL IMPAIRMENTS;
WHAT YOU NEED TO KNOW

_____
Instructor

_____
Training Agency

_____
Date

This training module was developed by the MITCH Project, the Florida Diagnostic and Learning Resources System/South Associate Center, and the Bureau of Education for Exceptional Students, Florida Department of Education.

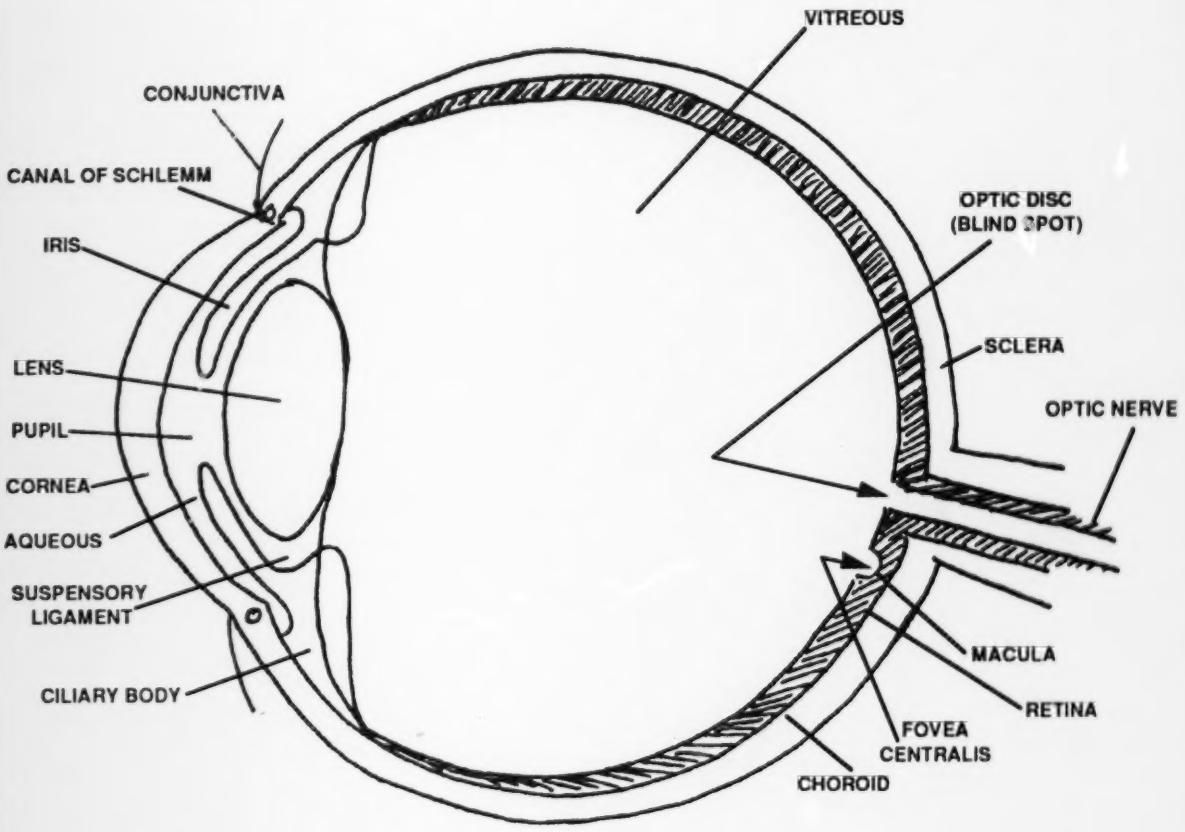
Appendix B

Reproducible Copies of Handouts/Overheads/Booklets

Note:

Each handout is numbered in a three-digit code such as: Handout 3-1-4. The first digit (3 in example) refers to the module number. The second digit (1 in example) refers to the hour of the Module, while the last number (4 in example) refers to the number of the handout itself. Consequently, the example number above denotes the fourth handout to be used during the first hour of Module 3.

STRUCTURES OF THE EYE



Module	Hour	Handout
12	1	1

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Bureau of Education for Exceptional Students

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PARTS OF THE EYE

Anterior Chamber - a section of the eye located in front of the eye between the cornea and iris which is filled with aqueous humor

Aqueous Humor - a clear, watery fluid which helps the anterior and posterior chambers of the eye and helps the eye maintain its shape and provides nourishment to the cornea and lens

Canal of Schlemm - the circular canal located at the juncture of the sclera and cornea through which the aqueous humor is excreted after it has circulated among the lens, the iris and the cornea.

Choroid - a layer between the sclera and retina which provides nutrients to the eye, especially the outer part of the retina

Ciliary Body - a section of the eye located between the choroid and the iris which contains the ciliary muscle and produces aqueous humor

Ciliary Muscle - located within the ciliary body and controls the shape and focusing power of the lens through relaxation and contraction.

Cone Cells - photoreceptor cells located in the center of the retina in an area called the macula. They work best in daylight and allow one to interpret acute detail and color.

Conjuctiva - a clear mucous membrane which covers the back of the eyelids and the visible white portion of the eye

Cornea - the clear or transparent front portion of the eye which protects the eye and refracts, or bends, light rays as they enter the eye

Eyelids - protect the eye from injury or excessive light and spread a thin layer of tears over the cornea

Fovea (centralis) - a small area in the center of the retina which is responsible for central vision and color vision

Iris - the visible colored portion of the eye which is a muscle that controls the dilating (opening) and constricting (closing) of the pupil

Lens - transparent disc suspended behind the iris which refracts, or focuses, light rays on the retina by changing shape

Macula - an area in the retina which surrounds the fovea and is responsible for the clearest central vision

Occipital Cortex - the area of the brain in which visual information is processed, or interpreted

Optic Disc - head of the optic nerve which is located at the back of the retina where all the retinal nerves meet

Optic Nerve - a nerve tract which carries information from the back of the retina to the brain

Orbit - bony structure which surrounds the eye and acts to protect it

Posterior Chamber - a section of the eye located between the iris and the lens which is filled with aqueous humor

Pupil - the dark spot visible in the center of the eye which controls the amount of light let into the eye

Retina - an area located in the center of the eye where light rays are focused and photoreceptor cells (cone and rod cells) are located

Rod Cells - photoreceptor cells located in the peripherals, or sides, of the retina which work best in dim lights and allow one to interpret gross, or large, movement of objects

Sclera - white outer layer of the eye which protects the eye

Suspensory Ligaments - hold the lens in place

Vitreous Humor - a clear mass of jellylike material between the lens and the retina

Module	Hour	Handout
12	1	2

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SNELLEN LETTERS FOR 20 FEET

T E	10 20/100
P V L	7 20/70
H C O E	5 20/50
H P D N L	4 20/40
D V H T L U	3 20/30
E V O U C T Y	2 20/25
P C Y L H N D V	1 20/20

(Used with permission of the National Society to Prevent Blindness.)

Module	Hour	Handout
12	1	3

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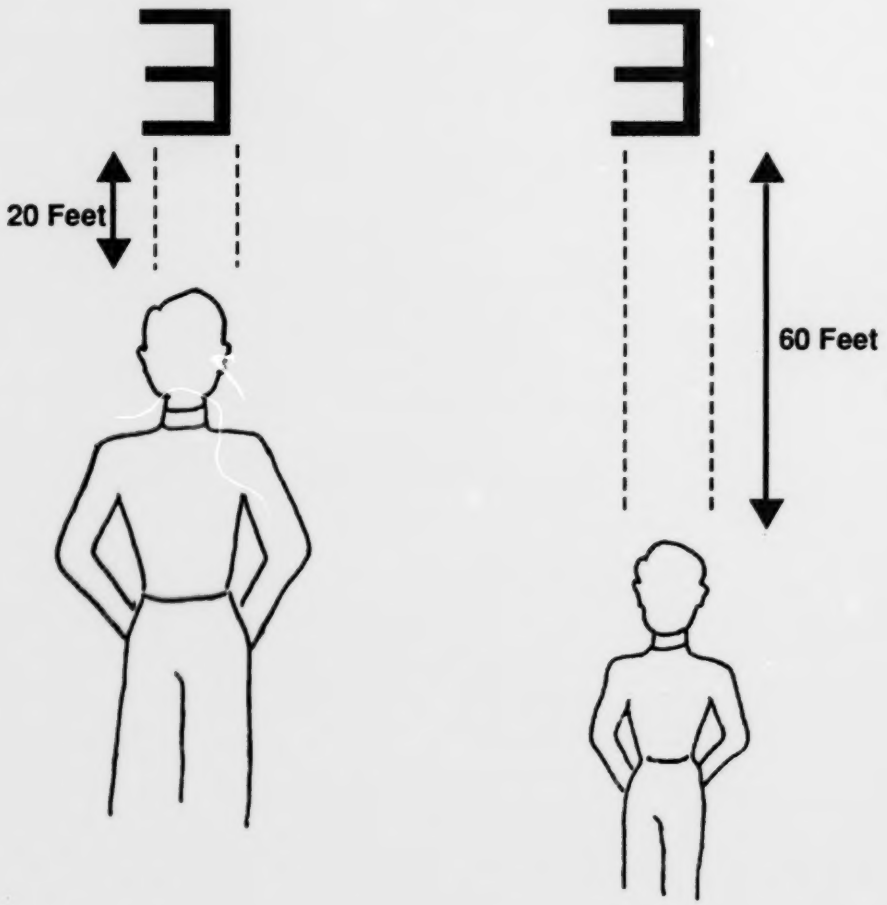
SORTING OUT THE NUMBERS

MEASURING VISUAL ACUITY

ACUITY is a measurement of how clearly a person can see an object at a given distance.

In this diagram the person at 20 and the person at 60 feet are seeing the E with the same degree of clarity.



Module	Hour	Handout
12	1	4

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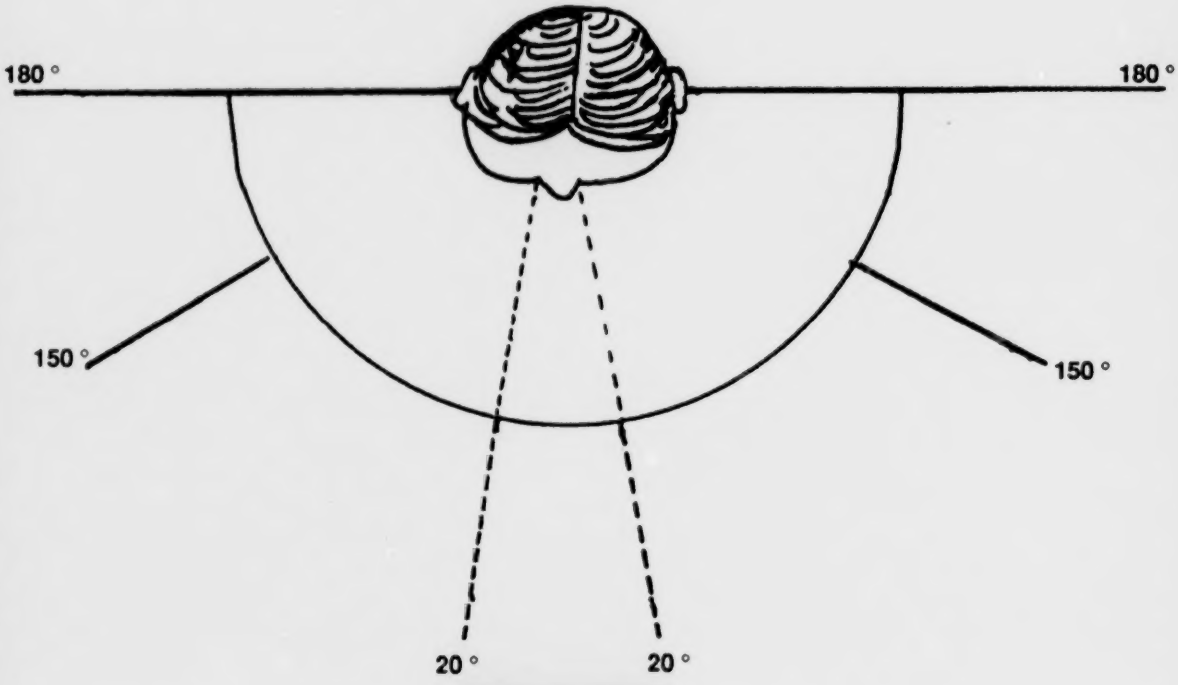
SORTING OUT THE NUMBERS

MEASURING VISUAL FIELD

VISUAL FIELD is a measurement of how much peripheral, or side, vision a person has. It is measured in degrees of a circle. Normally, people can see about 150 degrees.



Example of visual field of person with legal blindness.

A person is LEGALLY BLIND if the person has a peripheral field of 20° or less in both eyes.

Module	Hour	Handout
12	1	5

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TERMS USED TO DESCRIBE INDIVIDUALS WITH VISUAL IMPAIRMENTS

Legally Blind - an individual who with the best possible correction in the better eye has a measured visual acuity of 20/200 or worse or a visual field restricted to 20 degrees or less.

Partially Sighted - an individual who with the best possible correction in the better eye has a measured visual acuity between 20/70 and 20/200.

Deaf-Blind or Dual-Sensory Impaired - an individual who has both a visual impairment and a hearing impairment. The individual may have usable vision and/or hearing.

Multihandicapped - an individual with two or more impairments, e.g., cataracts (a visual impairment) and cerebral palsy (a physical impairment).

AN INDIVIDUAL'S VISION MAY BE DESCRIBED BY TERMS SUCH AS:

Functional Vision - the amount of usable vision an individual has.

Counting Fingers - the individual is able to count fingers at a specified distance.

Hand Motions - the individual is able to see the tester's hand moving at a certain distance, such as three feet.

Light Projection - the individual is able to tell in which direction a light is located.

Light Perception - the individual is able to tell if a light source is on or off.

Module	Hour	Handout
12	1	6

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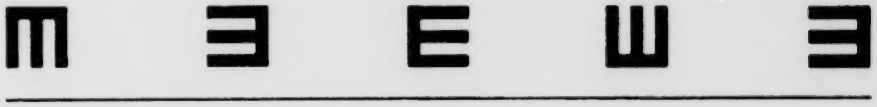

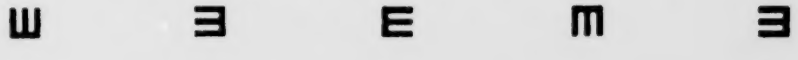

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Module	Hour	Handout
12	1	7

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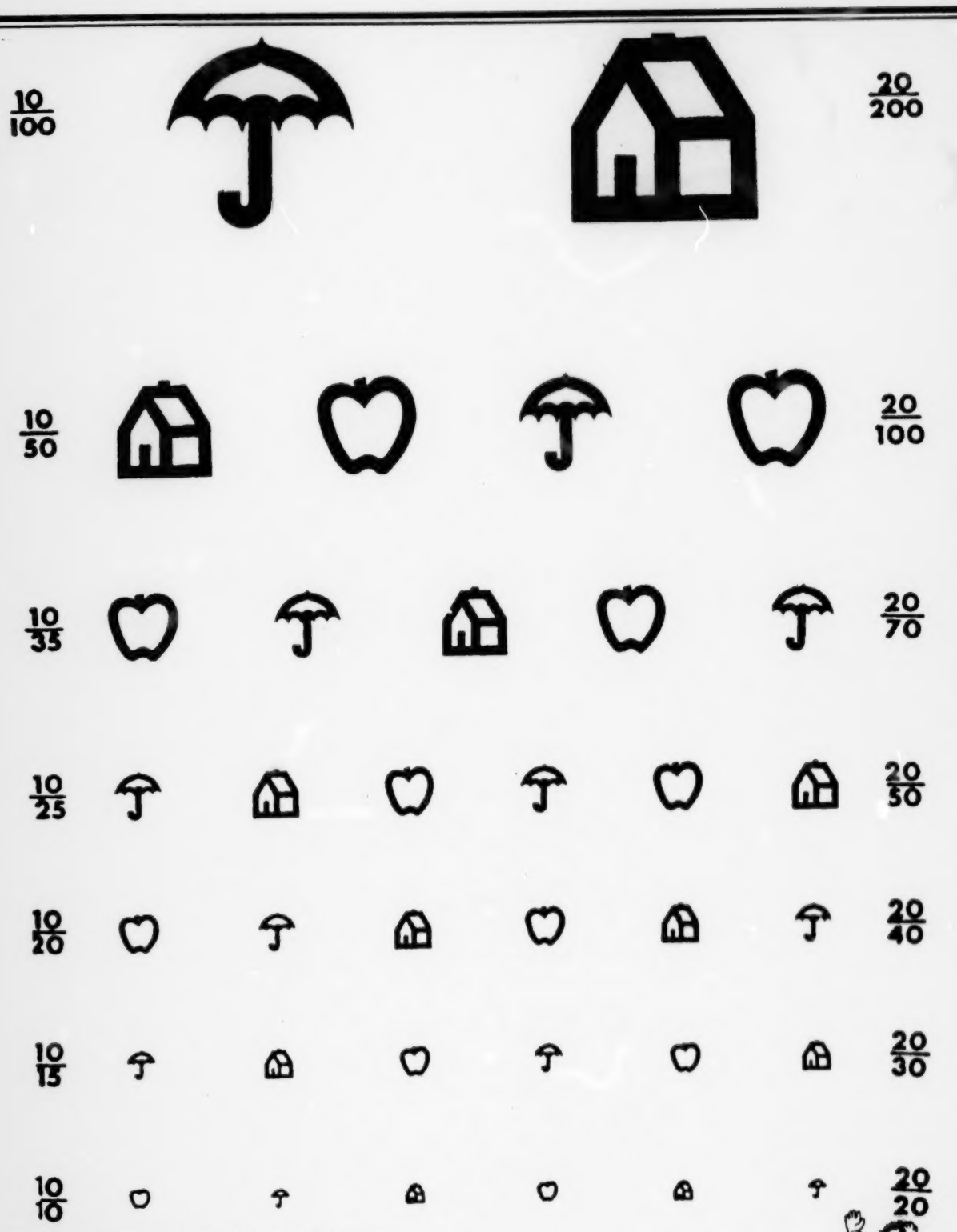

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Module	Hour	Handout
12	1	8

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TERMS DESCRIBING VISUAL DISORDERS

Adventitous - occurring after birth.

Albinism - congenital absence or deficiency of pigment in the iris, skin, or hair. This may result in decreased visual acuity, nystagmus, and/or photophobia.

Amblyopia - referred to as lazy eye. Results in loss of vision in the weaker eye without any apparent reason.

Aniridia - absence of the iris which causes the individual to have difficulty adapting to different lighting situations.

Anophthalmos - absence of a true eyeball.

Aphakia - absence of the lens resulting in the individual not being able to accommodate light rays.

Astigmatism - due to the shape of the cornea or lens, light rays are prevented from coming to a point of focus on the retina. The individual will have difficulty seeing far and near objects, etc.

Cataract - the lens becomes cloudy resulting in decreased visual acuity.

Congenital - occurring or present at birth.

Conjunctivitis - inflammation of the conjunctiva, or tissue around the eye.

Corneal Abrasion - a scrape on the surface of the cornea.

Diplopia - seeing one object as two objects.

Esotropia - turning inward of the eyes.

Exotropia - turning outward of the eyes.

Glaucoma - a disease resulting in increased pressure within the eye that may result in changes in the optic nerve and defects in the visual field.

Hyperopia (farsightedness) - a condition in which light rays are brought to a focus behind the retina. The individual can see far objects well, but has difficulty seeing near objects.

Keratitis - inflamation of the cornea.

Macular Degeneration - degeneration, or loss of functioning, in an area of the eye resulting in decreased central visual field and visual acuity.

Microopthalmos - a small underdeveloped eye.

Myopia (nearsightedness) - a condition in which light rays are brought to a focus in front of the retina. The individual can see near objects well, but has difficulty seeing faraway objects.

Nystagmus - involuntary, rapid movements of the eye in either a lateral (side to side), vertical (up and down), or rotary (circular) movement. The cause of nystagus is not known.

Optic Atrophy - a degeneration of the nerve tract that carries information from the retina to the brain.

Photophobia - extreme sensitivity to or discomfort from light.

Retinal Detachment - detachment of the retina from the choroid prohibiting the retina from functioning properly.

Retinitis Pigmentosa - degeneration, or decreased functioning, of the pigment in the retina initially resulting in decreased peripheral and night vision loss and eventually leading to total blindness.

Retinopathy of Prematurity - increased growth of blood vessels in the retina resulting in scar tissue that fills the space between the lens and the retina.

Strabismus - one or both eyes deviate (are not straight). The eye can turn upward, downward, inward (esotropia), or outward (exotropia).

SIGNS OF A POSSIBLE VISUAL DISORDER

You may notice that the child:

- has red eyes
- rubs eyes excessively
- indicates that the eyes are itchy
- blinks eyes excessively
- squints eyes excessively
- has excessively teary eyes
- has one or both eyes turning inward, outward, upward, or downward
- shuts or covers one eye
- tilts head to one side to see objects/activities
- turns head to one side to see objects/activities
- thrusts head forward
- has eyelids that are red-rimmed, encrusted, or swollen
- is overly sensitive to light
- has recurring styes
- complains of headaches, dizziness, or nausea following close eye work
- appears disoriented (trips, bumps into objects).

Module	Hour	Handout
12	1	10

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Welcome to The World

Booklet on Normal Developmental Milestones

(A reproducible copy of this booklet follows.)

This handout is also recommended for use with MITCH Modules 1, 2, 3, 6, 7 and 9.

Module	Hour	Handout
12	2	1

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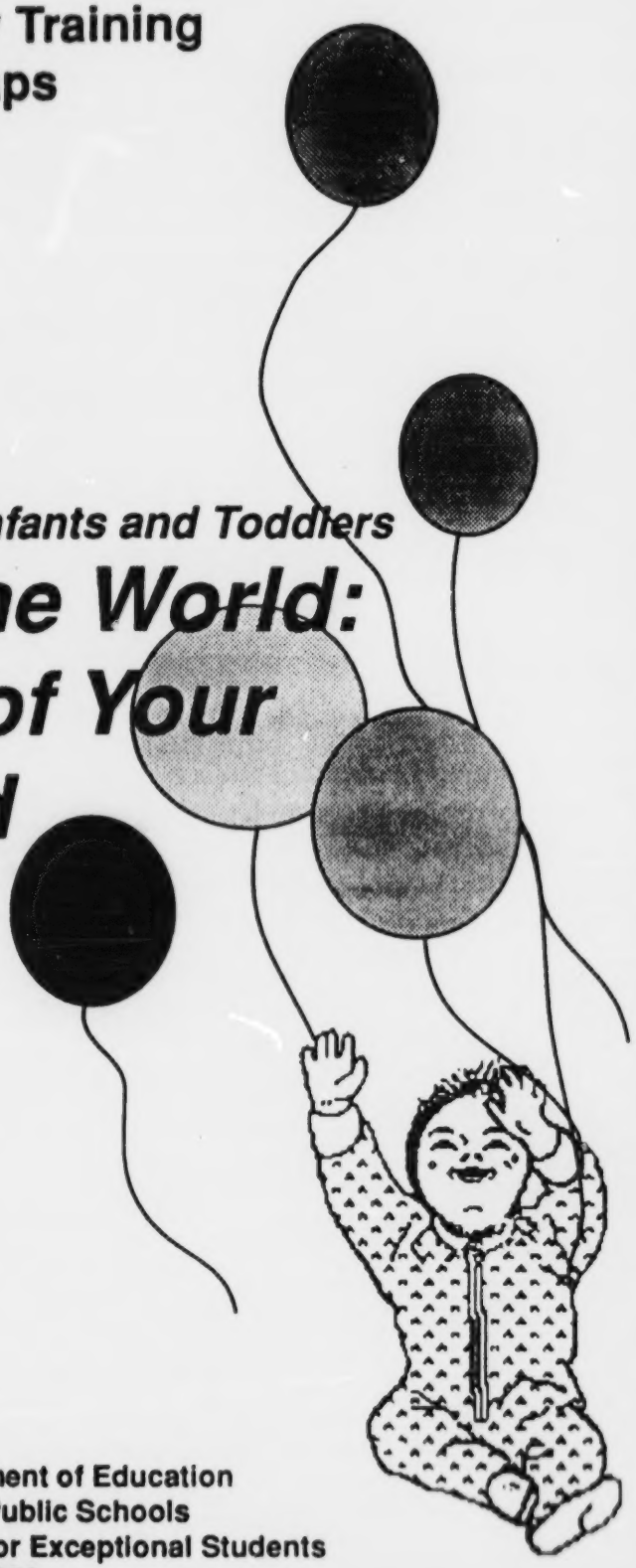
Model of Interdisciplinary Training for Children with Handicaps



A Series for Caregivers of Infants and Toddlers

Welcome to the World: An Overview of Your Growing Child

Florida Department of Education
Division of Public Schools
Bureau of Education for Exceptional Students
1990

This training series is one of many publications available through the Bureau of Education for Exceptional Students, Florida Department of Education, designed to assist school districts, state agencies which operate or support educational programs, and parents in the provision of special programs for exceptional students. For additional information on this training series, or for a list of available publications, contact the Clearinghouse/Information Center, Bureau of Education for Exceptional Students, Division of Public Schools, Florida Department of Education, Florida Education Center, Tallahassee, Florida 32399-0400 (telephone: 904/488-1879; Suncom: 278-1879; SpecialNet: BEESPS).

Model of Interdisciplinary Training for Children with Handicaps

A Series for Caregivers of Infants and Toddlers

Welcome to the World: An Overview of Your Growing Child

Florida Department of Education
Division of Public Schools
Bureau of Education for Exceptional Students
1990

124

This training series was developed through the MITCH (Model of Interdisciplinary Training for Children with Handicaps) Project, FDLRS/South Associate Center, Dade and Monroe County Public Schools, and funded by the State of Florida, Department of Education, Division of Public Schools, Bureau of Education for Exceptional Students, under State general revenue appropriation for the Florida Diagnostic and Learning Resources System.

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State of Florida
Department of State
1990

Model of Interdisciplinary Training for Children with Handicaps

A Series for Caregivers of Infants and Toddlers

Welcome to the World: An Overview of Your Growing Child

Dora Piner Kobasky
Early Childhood
Special Education Program
University of Miami
Miami, Florida

Violet McNamara
Bunche Park Elementary School
Dade County Public Schools
Miami, Florida

Steven E. Daley, Ph.D
Program Coordinator
Early Childhood
Special Education Program

Dade County School Board

Mr. William H. Turner, Chairperson

Ms. Janet R. McAliley, Vice-Chairperson

Mr. G. Holmes Braddock

Dr. Rosa Castro Feinberg

Ms. Betsy Kaplan

Dr. Michael Krop

Mr. Robert Renick

Project MITCH Staff

Carole Fox Abbott, Ph.D.
MITCH Project Specialist
FDLRS/South - Miami

Diana M. Fernandez
MITCH Project Assistant
FDLRS/South - Miami

Project MITCH Advisory Board

Host Agencies

Mary Anne Brost
Project Director
FDLRS/Gateway - Jasper

Dr. Susan Gold
Adjunct Assistant Professor
Mailman Center - Miami

Terri Kanov
Executive Director, Division of
Exceptional Student Education
Dade County Public Schools - Miami

Dr. Eleanor L. Levine
Supervisor
FDLRS/South - Miami

Dr. Keith Scott
Project Director
FDLRS/Mailman - Miami

Dr. Mary Theresa Urbano
Director of Nursing
Mailman Center - Miami

Other

Dr. Mimi Graham
Adjunct Assistant Professor
Florida State University - Tallahassee

Lois Klezmer
Coordinator, Early Childhood Education and
Sim Lesser
Assistant Professor, Early Childhood Education
Miami Dade Community College - Miami

Linda Machado
Parent Advocate
Chairperson, State Advisory Council on
Exceptional Student Education - Miami

Dr. Joyce McCalla, Director
Metro Dade Child Development Services -
Miami

William Osterhoudt
Director
Exceptional Student Education
Monroe County Public Schools -
Key West

Elizabeth P. Ridgley
Director, Pinecrest Presbyterian
Preschool - Miami

Dr. Sharon Vaughn
Associate Professor of Education
University of Miami - Miami

Sondra Wallace
Director of Education
Head Start - Miami

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The Bureau of Education for Exceptional Students (BEES) Editorial Commitee

Doris B. Nabi
Administrator
Program Services

Ruth S. Jones, Ph.D.
Supervisor
Program Services

Connie Cauley, Ph.D.
Program Specialist
Infants and Toddlers Program
Prekindergarten Handicapped Programs

Arlene Duncan
Program Specialist
Clearinghouse/Information Services
Program Services

Elizabeth DeVore, D.C.
Program Specialist
Prekindergarten Handicapped Programs

Critical readers

Eduardo Armenteros, NCSP
School Psychologist
FDLRS/South - Miami

Nina Kasper
Teacher, Pre-K Handicapped
Dade County Public Schools - Miami

Mary Theresa Urbano, A.R.N.P., Ph.D.
Director of Nursing; Assistant Professor of Pediatrics and Nursing
Mailman Center for Child Development - Miami

L. Penny Rosenblum
Teacher of Visually Impaired
Mailman Center for Child Development - Miami

Other contributors

Lisa Rozpad, Program Specialist for desktop publishing, Mailman Center for Child Development - Miami

TABLE OF CONTENTS

Introduction 1

Birth to Three Months 2

Three to Six Months 4

Six to Nine Months 6

Nine to Twelve Months 8

Twelve to Eighteen Months 10

Eighteen to Twenty-four Months 12

Twenty-four to Thirty-six Months 15

References 17

Introduction

This booklet is designed to provide a brief summary of normal development from birth to 36 months of age. It describes behaviors typically seen in children at various developmental levels. It gives examples of these behaviors in each of four categories: personal and social skills, language and understanding skills, small muscle skills, and large muscle skills. The booklet also suggests activities that adults can do with infants and toddlers.

It is important to remember that although all babies follow the same general pattern of growth, all children do not develop at the same rate. Children differ in appearance, in the way they feel about things, and in the way they learn. Also, a baby's development may not be steady. The baby may develop new large muscle skills, such as standing and walking, but not seem to develop new fine motor skills for a few months. Then, the child's large motor skill development may slow down while the child's language skills appear to develop very quickly. Because babies are unique and develop and grow at different rates, this booklet should be used only as a general guideline. The sequence of learning is what is important.

When a caregiver knows what a baby might be interested in and able to do next, the caregiver can better interact and play with the baby. Knowing what things a baby is not yet ready to do will keep the caregiver from expecting the child to play and respond in ways that are not yet possible for the child.

If a parent or caregiver has questions about a child's development, it is best to consult the child's doctor, nurse, or other qualified professional. The local Child Find specialist can also be called. Child Find is associated with the exceptional student education department of Florida's public schools and 18 support centers called the Florida Diagnostic and Learning Resources System (FDLRS) Associate Centers. The Child Find specialist at any FDLRS center can arrange to see a child who lives within that FDLRS region and who may not be developing normally. Call the local public school, FDLRS office, or Florida Department of Education, Bureau of Education for Exceptional Students (904/488-2077) for the number of the nearest Child Find specialist.

Birth to Three Months

PERSONAL AND SOCIAL SKILLS

- Smiles in response to adult's smile
- Looks at face when spoken to
- Tells primary caregiver from other adults
- Startles or cries at sudden loud noises
- Comforts to soothing gentle sounds

Suggested Activities

- Smile at baby
- Hang a crib mobile
- Sing lullabies to baby

LANGUAGE AND UNDERSTANDING SKILLS

- Expresses demands with cries and/or other sounds
- Gurgles and coos
- Responds to sound of rattle
- Shows excitement before feeding and anticipates other familiar events

Suggested Activities

- Talk to baby during feeding, changing, and bathing
- Provide many different sounds for baby (music, rattles, radio, bell, TV, etc.)
- Imitate sounds baby makes
- Listen to, watch, and allow time for baby to respond

SMALL MUSCLE SKILLS

- Follows bright objects with eyes
- Looks at object held in hand
- Attempts to grasp adult's finger
- Holds objects for a few seconds
- Sucks well

Note: Many movements are still controlled by reflexes

Suggested Activities

- Dangle objects in front of baby for baby to watch
- Provide different textures for baby to feel (terrycloth, stuffed animals, plastic toys) making sure objects are too big to swallow.
- Place objects (finger, rattle) in infant's hand to stimulate grasp

LARGE MUSCLE SKILLS

- Lifts head while lying on stomach
- Begins to reach toward object
- Automatically turns head to one side while lying down
- Moves arms and legs

Suggested Activities

- While baby is on stomach, dangle bright objects in front of baby to help baby lift head
- Hold baby in a sitting position so baby begins to hold head steady
- Provide baby with a favorite object to look at in order to help baby roll over
- To encourage sitting, place baby in corner of couch (supervised)

Three to Six Months

PERSONAL AND SOCIAL SKILLS

- Laughs
- Smiles on own
- Reaches for familiar people
- Begins choosing toys

Suggested Activities

- Play peek-a-boo with baby
- Let baby look at self in mirror
- Sing simple songs with baby and help baby do motions with hands to the music
- Massage baby's arms, back, and legs from top to bottom

LANGUAGE AND UNDERSTANDING SKILLS

- Squeals and laughs
- Babbles, combines vowel and consonant sounds (e.g., goo, ga)
- Explores objects by putting in mouth
- Chuckles
- Experiments by making sounds (e.g., goo ah)
- Begins to respond to own name
- Begins to show likes and dislikes

Suggested Activities

- Shake rattle beside baby's head (ear) to encourage head turning toward sound
- Continue to talk to baby; name objects
- Listen for baby's sounds and imitate them; wait for baby to respond to your sounds

SMALL MUSCLE SKILLS

- Picks up and holds rattle
- Chews
- Plays with hands at midline
- Starts to transfer objects from one hand to the other
- Holds objects with fingers against palm of hand (palmar grasp)

Suggested Activities

- Put object (rattle) in baby's hand and gently pull it to encourage baby to hold on to object
- Put a toy in baby's hand and let baby hold toy with both hands to encourage baby to transfer or switch object to the other hand
- Help baby pick up small, safe objects (1" blocks, assorted shapes)

LARGE MUSCLE SKILLS

- Brings objects to mouth
- Turns from back to side
- Rolls from stomach to back and then back to stomach
- Pushes up on arms when on tummy
- Holds head upright and steady without support
- Kicks at objects

Suggested Activities

- Put baby on tummy on a safe surface (carpet, blanket, mattress) and dangle interesting toys at baby's head
- Fasten mobile on crib for baby to kick and move baby's legs to demonstrate

Six to Nine Months

PERSONAL AND SOCIAL SKILLS

- Smiles at self in mirror
- Enjoys hide-n-seek, peek-a-boo, pat-a-cake
- Becomes attached to a particular toy or object
- Begins to fear strangers

Suggested Activities

- Hug and cuddle baby often
- Smile and talk to baby
- Play "How Big's the Baby," hide-n-seek, peek-a-book, pat-a-cake
- Let baby play in front of large mirror

LANGUAGE AND UNDERSTANDING SKILLS

- Starts imitating sounds
- Makes eager sounds for bottle or breast
- Uncovers toy that is hidden by cloth
- Knows on name
- Vocalizes to self when alone

Suggested Activities

- Look at picture books with baby
- Sing songs with baby
- Play hide-n-seek with toys under cloth

SMALL MUSCLE SKILLS

- Starts feeding self
- Rakes or scoops small objects
- Grasps with three fingers (inferior pincer grasp)

Suggested Activities

- Provide baby the opportunity to pick up safe foods (cereal, crackers) and feed self
- Let baby hold crayon in hand and scribble on big piece of paper
- Provide many small objects for baby to pick up making sure they are too big to swallow

LARGE MUSCLE SKILLS

- Sits by self for a short time
- Creeps and crawls
- Pulls self to standing on furniture
- Rocks back and forth when on hands and knees
- Plays with feet when on back
- Stands by holding on to furniture, hands, etc.

Suggested Activities

- Encourage baby to pull up to a standing position
- Place a toy out of reach and encourage baby to try to get the toy by crawling to it
- Allow baby to stand next to furniture
- Allow lots of room for baby to crawl and explore (supervise)

Nine to Twelve Months

PERSONAL AND SOCIAL SKILLS

- Aware of strangers
- Tugs at or reaches for adults to get attention
- Begins drinking from a cup
- Likes or dislikes certain foods
- Demonstrates affection

Suggested Activities

- Have baby sit near the family during meals
- Play pat-a-cake
- Help baby learn to hold a cup containing a small amount of liquid
- Hug and kiss baby often
- Respond with a hug or by talking when baby reaches for you

LANGUAGE AND UNDERSTANDING SKILLS

- Waves bye-bye
- Responds to "no-no"
- Starts understanding simple questions ("Want some more juice?")
- Shakes head "no-no"
- Understands familiar words (mommy, daddy, ball, cookie)
- Looks at pictures in book
- Begins enjoying nursery rhymes and songs

Suggested Activities

- Make puppet from socks and pretend the puppet is "talking" to baby
- Read nursery rhymes and sing songs to baby
- Help baby look at scrap book
- Identify objects with names

- Listen and respond to communication from baby

SMALL MUSCLE SKILLS

- Holds own bottle
- Picks up small objects using thumb and finger
- Uses two hands together with coordination (picks up cup)
- Claps hands
- Drops objects with voluntary release

Suggested Activities

- Show baby how to stack small blocks
- Let baby play with the pots and pans in the kitchen
- Help baby put objects into a container
- Let baby play with empty boxes of all sizes
- Give baby cereal to feed self

LARGE MUSCLE SKILLS

- Gets into sitting position from lying down position
- Sits down from standing position
- Walks with assistance
- Stands alone
- Bangs two toys together

Suggested Activities

- Play stand up, sit down, lie down imitation game
- Help baby to walk with or without support
- Let baby "cruise" around by holding on to furniture and walking

Twelve to Eighteen Months

PERSONAL AND SOCIAL SKILLS

- Enjoys having people clap
- Starts feeling emotions of jealousy, affection, sympathy
- Plays chasing and hiding games
- Shows specific wants by gestures and vocalizations
- Plays ball with an adult
- Becomes attached to favorite possession (blanket, toy)

Suggested Activities

- Provide washcloth for child and allow child to care for doll by washing, hugging, and kissing doll
- Let child help undress self
- Let child start feeding self with a spoon
- Ask child to show how big child is (help child raise hands high)
- Take child on outings (picnic, zoo, parks) and talk about the things you see and do with child
- Roll a large ball to the child and ask child to roll it back to you

LANGUAGE AND UNDERSTANDING SKILLS

- Names body parts
- Points to several objects or pictures when named
- Follows simple commands

Suggested Activities

- Encourage child to repeat familiar words
- While child is bathing or dressing, name body parts and let child repeat the names
- Look at a picture book with child and name objects in the pictures

SMALL MUSCLE SKILLS

- Feeds self with spoon
- Attempts scribbling
- Stacks small objects
- Builds tower of two blocks

Suggested Activities

- Play game with small blocks; stacking, lining up, knocking down
- Encourage child to draw or scribble with a crayon or water soluble marker
- Play with bean bags or soft sponge balls
- Encourage self feeding with spoon

LARGE MUSCLE SKILLS

- Walks alone
- Throws a ball
- Sits in a chair
- Improves balance and coordination

Suggested Activities

- Allow child to walk up stairs with assistance
- Allow child to walk as much as possible
- Give child a pull toy to play with
- Roll and throw ball or bean bag
- Encourage use of child size furniture (chair, table)

Eighteen to Twenty-four Months

PERSONAL AND SOCIAL SKILLS

- Likes being read to
- Partially feeds self
- Independence grows stronger
- Exhibits curiosity and is "into everything"
- Has special relationship with each parent
- Enjoys playing next to another child (little interaction)
- Enjoys touching and hugging

Suggested Activities

- Encourage child to dress and undress self
- Encourage child to pick up and put away own toys
- Encourage child to help with simple household chores
- Encourage child to use both a spoon and a fork

LANGUAGE AND UNDERSTANDING SKILLS

- Makes simple choices among toys
- Mimics another child's play
- Begins to ask questions
- Puts two words together
- Asks for items by name (e.g., "ball," "doll," "cookie")
- Can follow one or two step directions

Suggested Activities

- Begin to give simple directions for child to follow
- Play a simple game of "Simon Says"
- Read to child 5 to 10 minutes each day
- Watch quality TV programs with child and talk about what you see but limit the amount of time child spends in front of the TV
- Answer child's questions simply

SMALL MUSCLE SKILLS

- Scribbles and imitates simple strokes such as vertical lines, horizontal lines, and circular strokes
- Takes off socks and shoes purposefully
- Takes things apart and puts them back together

Suggested Activities

- Help child put objects through an opening in a container, and help child dump them out again
- Use simple nesting boxes or cans
- Give child simple insert puzzle to complete (2-3 pieces)
- Finger paint with pudding
- Provide chalk, markers, pencils, paint, and brushes for sidewalk, large paper, newspaper, etc.
- Let child handle clay, play dough (recipe follows), and shaving cream

  1 cup flour *2 Tblsp. cream of tartar* *1 Tblsp. oil*
  1 cup water *1/2 cup salt*
  Mix all together. Color with food coloring if desired.

LARGE MUSCLE SKILLS

- Jumps with two feet
- Moves body in time to the music
- Walks up and down stairs with help
- Runs
- Attempts to kick a ball

Suggested Activities

- Show child how to jump holding child's hand while jumping
- Let child listen to music and show child how to swing, clap, and dance to the music
- Have short running races on soft surfaces (grass, carpet)
- Play "Kick the ball"

Twenty-four to Thirty-six Months

PERSONAL AND SOCIAL SKILLS

- Interacts with other children in simple games
- Verbalizes toilet needs

Suggested Activities

- Praise child when toilet needs are indicated
- Play "Ring Around the Rosie," "Duck, Duck Goose"
- Play hide-n-seek
- Play dress up

LANGUAGE AND UNDERSTANDING SKILLS

- Follows two-step directions
- Takes part in simple verbal conversation (e.g., "What's your name?")
- Answers simple "what" questions
- Uses two or three word sentences regularly (e.g., "Me want juice.")

Suggested Activities

- Allow child a choice of foods at mealtime
- Ask child to follow directions (e.g., "Pick up your doll and put it on the shelf, please.")
- Listen to and talk with child
- Read books for 10 minutes each day with child and talk about the pictures

SMALL MUSCLE SKILLS

- Uses spoon and cup independently
- Helps pick up toys
- Turns handle to open door
- Completes simple insert puzzle (3-4 pieces)
- Unscrews lids

- Builds 6-8 cube tower
- Snips paper with scissors

Suggested Activities

- Provide simple puzzle for child to complete
- Provide child with blunt scissors and paper to snip
- Provide sand, pudding, or finger paint for writing with finger
- Provide many containers with tops to open and close

LARGE MUSCLE SKILLS

- Rides tricycle
- Pushes or pulls door open
- Walks up stairs holding rail

Suggested Activities

- Arrange for child to play games with others such as "London Bridge is Falling Down," "Tag"
- Encourage practice in skipping and hopping
- Provide practice in riding a tricycle
- Show child how to jump over a chalk mark or hose

References

Alpern, G. D., Boll, T. J., & Shearer, M. A. (1984). Developmental profile II. Los Angeles, CA: Western Psychological Services.

Bangs, T. E., & Garrett, S. (1965). Birth to three scale for handicapped children. Houston, TX: Houston Speech and Hearing Center.

Bayley, N. (1969). Bayley Scales of Infant Development. New York: Psychological Corporation.

Brazleton, T. B. (1981). On becoming a family: The growth of attachment. New York: Delacorte Press.

Brazleton, T. B. (1974). Toddlers and parents: A declaration of independence. New York: Delacorte Press.

Brazleton, T. B. (1969). Infants and mothers: Differences in development. New York: Delacorte Press.

Bzoch, K. R., & League, R. (1971). Receptive-Expressive Emergent Language Scale. Baltimore, MD: University Park Press.

Doll, E. A. (1966). Preschool Attainment Record. Circle Pines, MN: American Guidance Service.

EMI Assessment Scale. Department of Pediatrics, University of Virginia Medical Center, Box 232, Charlottesville, VA 22901.

Frankenburg, W. K., & Dodds, J. B. (1969). Denver Developmental Screeing Test. Denver, CO: University of Colorado Medical Center.

Gessell, A. L. (1940). The first four years of life. New York: Harper & Row.

Johnson and Johnson Child Development Program. (1979). The first wonderous year. New York: Macmillan.

LeMay, D. W., Griffin, P. M., & Sanford, A. (1975). Learning Accomplishment Profile, Diagnostic-Revised. Winston-Salem, NC: Kaplan School Supply Corporation.

Stutsman, R. (1948). The Merrill-Palmer Scale of Mental Tests. Los Angeles, CA: Western Psychological Services.

State of Florida
Department of Education
Tallahassee, Florida
Betty Castor, Commissioner
Affirmative action/equal opportunity employer

HELP LANGUAGE DEVELOPMENT IN INFANTS WITH VISUAL IMPAIRMENTS BY:

- naming and describing objects and events
- using the senses of touch and hearing to supplement usable vision
- pairing the senses of touch and hearing
- using consistent language
- providing a variety of experiences with real objects.

Module	Hour	Handout
12	2	2

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SUGGESTIONS FOR DEVELOPING LANGUAGE SKILLS IN INFANTS WITH VISUAL IMPAIRMENTS

Name and describe objects and wants for the infant:

- Start with familiar objects and events that the child encounters daily (such as bottle/foods, favorite toys, family members). Emphasize the words as you talk about and describe them to the child.
- Always tell the child what's coming. Let the child anticipate (get ready) and say the object's name by gently guiding the child's hand to feel what it is when you bring over and describe the object.
- Encourage the infant to imitate the word. Say it two or three times and then wait and give the infant a chance to try. Praise all attempts.
- Use the senses of touch and hearing.
- Help the child perform fingerplay movements by placing your hand over the child's as you move the child's fingers and sing the songs.
- Place your hand over the child's hand to help the child make gestures at appropriate times such as waving "bye bye," raising arms "up" to get picked up, or patting self to say "me."

Pairing the senses of touch and hearing:

- Play vocal games with the child by taking turns making simple sounds. Place the child's fingers on your lips to feel the sounds as you say them.
- Help the child reach out and find your face when talking or holding the child.
- Let the child feel sound-making objects as you use them during daily activities such as cooking (shaking the juice, mixing with a spoon), or taking a bath (running water, playing with squeeze toys).

Use consistent language by using the same word/name for:

- family members and familiar people
- favorite toys
- daily events.

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SUGGESTIONS FOR DEVELOPING COGNITIVE SKILLS IN INFANTS WITH VISUAL IMPAIRMENTS

Activate soundmaking toys and say the name of the toy before giving it to the infant to help the child realize that objects exist and have a name even when not held or touched. Soundmaking toys include:

- rattle
- bell
- music box.

Describe sounds you make while doing daily activities:

- closing a door
- washing dishes
- sweeping, vacuuming the floor
- walking
- turning on radio/record player.

Allow the infant to smell different household or daily items while you are using them:

- bathroom items - powder, soap, toothpaste
- cooking items - spices, sweets, flour for bread baking
- grocery items - fish, fresh fruit and vegetables.

Place toys near the infant so that the infant can reach out to touch or get one:

- on sides of crib
- on high chair tray
- on the floor.

Help the infant play with a variety of cause/effect toys which have sound effects and movable parts:

- mobiles
- busy boxes
- activity centers
- music instruments
- squeeze toys.

Module	Hour	Handout
12	2	4

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HELP MOTOR DEVELOPMENT IN CHILDREN WITH VISUAL IMPAIRMENTS BY:

- allowing child to be in many different positions
- encouraging child to move as much as possible
- using hand-over-hand teaching
- using sound to encourage movement.

Module	Hour	Handout
12	2	5

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SUGGESTIONS FOR DEVELOPING MOTOR SKILLS IN INFANTS WITH VISUAL IMPAIRMENTS

Provide lots of time for the child to experience different positions including:

- on stomach
- sitting in a variety of positions (e.g., against your chest, in a baby carrier, propped up in a corner of a box)
- on back.

Place baby on a variety of textures:

- wood floor
- carpeting
- quilt
- grass.

Assist the baby hand-over-hand, from behind, in learning the fine motor skills of:

- reaching
- grasping
- shaking
- banging
- poking
- pulling
- pushing.

Position and assist the baby in learning the gross motor skills of:

- rolling
- sitting
- crawling
- standing
- walking.

Provide materials for the baby that appeal to senses other than vision, for example:

- toys that make noise
- toys of various smells
- toys of various textures
- toys of various tastes.

Once the baby starts to reach for objects, place them further away, so that the baby has to roll, creep, or crawl to get the desired object.

If the baby puts head down when on stomach, place the toys in front of the baby, so that the baby needs to lift head in order to see them.

If you have concerns or questions regarding a child's motor development consult the child's parents and refer to the physician for a possible physical therapy or occupational therapy evaluation.

Module	Hour	Handout
12	2	6

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HELP SELF-HELP DEVELOPMENT IN INFANTS WITH VISUAL IMPAIRMENTS BY:

- holding the infant during feeding
- using consistent language just before and during feeding
- guiding infant's hand to bottle
- guiding infant's hand to dropped bottle
- describing what the child is doing
- holding and cuddling the infant
- talking about and touching body parts during dressing
- talking about and feeling different textures
- talking about and having baby smell different smells.

Module	Hour	Handout
12	2	7

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WAYS TO DEAL WITH TACTUALLY DEFENSIVE CHILDREN

Always talk about what the child is going to feel or eat before and as you present it.

Gently encourage the child to feel or grasp the object/food by taking and guiding the child's hands. Use a firm touch, not a light one.

Praise the child for all attempts (no matter how brief) at touching or tasting.

Be consistent in presenting a variety of tactual experiences:

- **provide foods of different textures to prevent the child from getting "stuck" on one type of food consistency (i.e., mushy)**
- **provide sensory play which includes wet, soft, rough, or bumpy textures so that children who favor one type of texture (i.e., rough/ sand) will build up a tolerance for other textures (i.e., soft/cotton), too.**

Do not trick the child by "hiding" disliked textures within favorite ones (i.e., slipping peas in applesauce, and placing cotton balls in sand) without preparing the child first, because the child needs to trust you.

Module	Hour	Handout
12	2	8

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SUGGESTIONS FOR DEVELOPING SELF-HELP SKILLS IN INFANTS WITH VISUAL IMPAIRMENTS

When giving the baby the bottle you can help the baby feel comfortable and participate more by:

- **holding the baby**
- **telling the baby the bottle is coming as you bring it to the mouth**
- **talking about what the baby is doing as you gently guide the baby's hands to help hold the bottle**
- **asking the baby "where's the bottle?" and then guiding the baby's hands to find the bottle.**

During bath time you can provide the baby with a variety of sensory experiences and body awareness concepts by:

- **talking about bath time while the water is running**
- **talking about each body part as you are washing the baby**
- **encouraging the baby to feel and smell the soap, wet/dry towel, powder, body lotion, or clean diaper**
- **putting toys in the tub for the baby to find.**

As you are helping the baby get dressed or undressed you can encourage independence and body awareness concepts by:

- **letting the baby help as much as possible to pull off sock, pull shirt down off face, or push arms through sleeves**
- **talking about the body parts as they are being dressed**
- **encouraging the baby to feel differently textured clothing.**

During meal times you can help the baby try different foods and begin self feeding by:

- **putting fingerfoods on the baby's tray and helping the baby search for them**
- **talking about and providing a variety of textured foods**
  - **cereal**
  - **crackers**
  - **bananas**
  - **peas**
- **helping the baby hand-over-hand from behind to hold a two-handed cup**
- **letting the baby be as independent as possible and being prepared for the mess that this may cause.**

Module	Hour	Handout
12	2	9

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HELP SOCIAL-EMOTIONAL DEVELOPMENT IN CHILDREN WITH VISUAL IMPAIRMENTS BY:

- touching and stroking
- talking
- guiding child's hands to explore face of parent
- observing and responding to what the child seems to want.

Module	Hour	Handout
12	2	10

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SUGGESTIONS FOR DEVELOPING SOCIAL-EMOTIONAL SKILLS IN INFANTS WITH VISUAL IMPAIRMENTS

Help the baby learn about "self" by:

- **touching and stroking the baby**
- **talking about what the baby is doing or where the baby is**
- **using the baby's name.**

Help the baby learn about others by:

- **gently guiding the baby's hand to explore your face**
- **talking about what you are doing while baby is within hearing distance**
- **telling the baby who is approaching**
- **encouraging the baby to move towards you.**

Help the baby learn about the things in the environment by describing events and sensory experiences such as:

- **different smells**
- **daily sounds**
- **various textures**
- **visual stimuli.**

Help the child learn socially appropriate interpersonal behaviors:

- **Verbally remind the child to keep "your head up." Lightly tap under the child's chin as an extra prompt, if needed.**
- **Encourage the child to face and/or reach for you when you are talking to the child.**
- **Provide hand-over-hand assistance to the child for social greetings such as waving "bye" and "hi" and encouraging the same social speech.**
- **Provide praise for social behavior ("yeah," clapping, hugs) to help the child develop self-concept as positive affective responses (smiles, laugh, clap, reaching).**
- **Arrange for interaction with same age children to help develop play skills.**

Module	Hour	Handout
12	2	11

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MANNERISMS

To help a child decrease eye gouging or eye poking behaviors:

- **Redirect the child's hands to do a desirable activity such as manipulating a toy, or acting out fingerplay songs.**
- **Gently move the child's hands away from the eye(s). Firmly say "hands down," and redirect the child to an appropriate activity.**
- **Remember to give frequent praise for playing nicely with toys, with hands away from the eyes.**
- **When the child is playing alone, be sure to place a variety of stimulating toys within reach.**

Module	Hour	Handout
12	2	12

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TO HELP A CHILD DECREASE ROCKING BEHAVIORS

Provide the child opportunities to engage in appropriate vestibular activities such as:

- **swinging (swing, hammock)**
- **swaying (music)**
- **rocking (boat, horse).**

When the child is playing alone, be sure to place a variety of stimulating toys that require hand manipulation with the child's reach.

Verbally encourage the child to "sit up" or "stand still" and then engage the child in another activity.

To help a child decrease light gazing or light flicking behaviors be conscious of the environment:

- **Whenever possible, position the child so that lamps and overhead lights are not in front or right above the child.**
- **Position the child so that window sunlight is not visually distracting by keeping the child's back to the window.**
- **If necessary, keep window shades down.**

Encourage the child to engage in appropriate behaviors:

- **Redirect the child's attention and hands to a desirable activity.**
- **Provide visually stimulating toys/activities within child's reach.**
- **Remember to praise the child periodically for "nice playing".**

Module	Hour	Handout
12	2	13

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TOOTHBRUSHING TASK ANALYSIS:

- locate and pick up toothpaste tube
- unscrew toothpaste cap
- put down cap
- locate and pick up toothbrush
- place open end of toothpaste tube on top of toothbrush bristles
- squeeze the toothpaste onto the toothbrush
- put down the toothpaste
- brush teeth in all areas of mouth; front, sides, top, bottom, back
- locate cold water faucet
- turn on cold water
- place toothbrush under running water
- turn off water
- put away toothbrush.

Module	Hour	Handout
12	3	1

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STRATEGIES TO REDUCE INAPPROPRIATE REPETITIVE SPEECH

BE A LANGUAGE MODEL AND SET THE TONE FOR APPROPRIATE SPEECH BY:

- asking questions or giving directions once, and allowing the child time to respond.
- repeating or rephrasing the request only after the child has been given time to understand and act on it.
- avoiding the repetition of the same question.

HELP TO DISCOURAGE THE CHILD FROM MERELY ECHOING THE QUESTION YOU HAVE ASKED BY SAYING THE FIRST ONE OR TWO WORDS OF THE APPROPRIATE ANSWER FOR THE CHILD AND:

- asking "Do you want a cracker or a pretzel?"
  Then quickly prompt by saying "I want ....." (let the child finish).
- asking "What is your name?"
  Then prompt "My name is ....." (let the child finish).

INCLUDE GROUP TURN-TAKING ACTIVITIES SUCH AS:

- Pass around a box of different items. Each child gets a turn to take out an object and is asked, "What is it?"; "How does it feel?", etc.
- Ask personal data questions during a group time, i.e., "What is your name?"; "How old are you?"

CONTINUALLY INTRODUCE NEW ACTIVITIES

Build the child's vocabulary and speech repertoire. This will help eliminate perserverative/ repetitive speech about the same toy, and stimulate new vocabulary.

DESCRIBE DIFFERENT ASPECTS/ACTIONS OF FAMILIAR THINGS TO PREVENT THE CHILD FROM REPEATING THE SAME STATEMENT ABOUT THEM:

- If a child continually hits a drum with a stick and repeats, "You beat the drum, you beat the drum, you beat the drum," you can model other things the child can do with the drum. Say "You can use your hands to play the drum"; "Let's march while I play the drum"; "Pass the drum to ....."
- You can describe different attributes. Say, "You can eat an apple or roll an apple. What else can you do with an apple?"

REDIRECT THE CHILD:

- Redirect the child who repeats by modeling the correct language for the activity at hand. Describe what is going on and then ask the child about it.
- Always praise the child for appropriate speech ("That's right!"; "Good talking!").
- Do not tell the child "No" when the child says something inappropriate (you never want the child to feel talking is wrong). Redirect the child to talk about the current activity or model a better way of saying what the child said incorrectly.

Module	Hour	Handout
12	3	2

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ACTIVITIES FOR COGNITIVE DEVELOPMENT

Help the child learn spatial concepts (up, down, in, out, under, over, top, bottom, etc.), through the following activities:

- obstacle courses using tunnels, slides, hoops, etc.
- fingerplay songs and musical movement (Eentsy, Weentsy Spider; Hokey Pokey; Open/Shut Them)
- block play with cars, bridges, tunnels, garages, planes
- hide and seek using objects and telling the child where they are (under the table, in the box, behind the chair, on the top shelf)
- flashlights moved up and down.

Help the child learn matching and sorting skills:

- let the child help put away spoons, forks in the right compartment
- allow the child to help put away own clothes in the right places (socks in the top drawer, shirts in the bottom drawer)
- let the child help put away certain groceries (put apples in a bowl, cans in a cabinet).

Help the child learn beginning number concepts:

- encourage the child to take only one object out of a box/container at a time
- count with the child when putting several objects away
- sing counting songs
- count fingers and other body parts
- let the child pass out objects to others, one item to a person, such as napkins, cups, or crackers at snack time.

Help the child learn color and/or shape identification by using:

- assorted blocks
- shape/color puzzles
- shape/color sorters
- stencils and crayons, markers
- paints
- cutout cookies.

Help the child learn tactual discrimination/pre-braille skills:

- encourage the child to feel/scan from left to right when presenting textured surfaces, touch books or choices of objects
- make a "feely book" of different textured surfaces (i.e., felt, sandpaper, corduroy, etc.), for the child to turn pages and feel/discriminate
- mame a "feely box" containing different textures and objects for child to play games and describe the objects
- introduce texture puzzles, form boards.

Help the child learn problem-solving skills with objects:

- cause/effect toys which require various actions to manipulate
- graduated stacking rings
- fit-together blocks.

Module	Hour	Handout
12	3	3

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ACTIVITIES FOR LANGUAGE DEVELOPMENT

It is important to remember that you are a language model for the child. You should always talk in words the child understands and language you want to child to use.

To encourage the child to feel confident about talking, always try to:

- **listen and respond to the child's attempts at language**
- **praise the child for appropriate attempts at language**
- **give the child time to respond to your questions and requests (count to ten to yourself, if that helps).**

Specific activities to help increase expressive language/social speech:

- **introduce/teach a variety of songs and nursery rhymes**
- **periodically read familiar stories and let the child fill in phrases**
- **offer choices (at snack time, play time, meal time, etc.) so the child must ask for the preferred choice**
- **let the child be a "messenger" within familiar environments in which the child must request things or relay simple information to other people.**

Specific activities to help increase receptive language/concept development:

- **play listening skills games in which the child has to identify certain sounds (i.e. musical instruments, animal sounds, household sounds, etc.)**
- **read stories and incorporate corresponding objects for the child to feel and relate to**
- **continue to label and describe objects and activities**
- **gradually ask more difficult questions beginning with "what, who, where, which, when".**

Module	Hour	Handout
12	3	4

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GROSS MOTOR ACTIVITIES TO USE IN PROGRAM OR CAREGIVING SETTING

It is important to allow and encourage the child to perform all transitions as independently as possible, beginning with the most simple ones:

- **lying down to sitting up**
- **sitting to standing**
- **standing to sitting.**

Later, move to more advanced transitions:

- **getting in and out of bed**
- **walking from one room to another**
- **going up and down the stairs.**

Improve body awareness and coordination by:

- **marching to music while playing an instrument**
- **musical movement songs**
- **Simon Says games.**

Increase awareness of body in space through indoor/outdoor obstacle courses:

- **tunnels (you can use large cutout boxes)**
- **large blocks for stepping over, on, or around**
- **under or around tables/bathtub**
- **step in front of or through hoops.**

Develop upper arm strength and coordination with:

- **various ball games**
- **bean bag tosses**
- **plastic bowling set**
- **push/pull toys.**

Develop perceptual skills for independent traveling using:

- **push toys, wagons, strollers, shopping carts**
- **scooters**
- **large ride-on toys.**

These toys can help children learn how to move around furniture, in and out of doorways, and through hallways. Children discover that when the scooter or wagon touches a surface such as a wall or table, it is necessary to turn or redirect. This type of problem-solving in mobility will help children who may need to use canes in the future.

Module	Hour	Handout
12	3	5

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SUGGESTED ACTIVITIES FOR FINE MOTOR DEVELOPMENT

(Be careful of the size of objects for children who are still mouthing everything!)

Help the child develop different hand grasps using:

- **various musical instruments (shakers, bells, tambourines, gourds) that make a noise when they are shaken**
- **art activities (paintbrush, markers, crayons, collaging)**
- **manipulative toys (pegs, stacking blocks, shape sorters)**
- **sensory play materials (beans, macaroni, cotton balls, whipping cream, water)**
- **finger foods (cookies, crackers, pretzels, cereals)**
- **dials that turn (radio, toys).**

Help the child acquire midline and bimanual (two handed play) using:

- **ball game activities**
- **musical instruments (cymbals, sandpaper blocks, tomtom drums, tambourine)**
- **manipulative toys (popbeads, fit-together blocks, stacking rings).**

Help the child develop manipulative skills such as twisting, turning, poking, by using:

- **a variety of cause/effect toys (pop-up pals, jack-in-the-box, activity centers)**
- **everyday activities such as turning water on/off, turning doorknobs, unscrewing toothpaste cap).**

Help the child increase finger and hand strength through squeezing, pulling, pushing, with:

- **art/sensory materials such as clay, glue, finger-paint**
- **play with manipulative toys and cause/effect toys (busy box, squeeze toys, pegs, etc.)**
- **dressing/undressing (pulling large size clothes on/off)**
- **squeezing toothpaste.**

Help the child develop visual/motor and perceptual skills with:

- **block play (putting blocks on/off, in/out, under/over, etc.)**
- **stacking toys**
- **puzzles, formboards, shape sorters**
- **coloring with crayons or markers**
- **stringing beads.**

Help the child develop tactual discrimination during:

- **sensory play (water, sand, cotton, rice, feathers, macaroni, etc.)**
- **cooking (warm, cold, wet, dry)**
- **arts and crafts activities (rough, soft, smooth, hard).**

Module	Hour	Handout
12	3	6

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SUGGESTED ACTIVITIES FOR SOCIAL-EMOTIONAL DEVELOPMENT

Social-emotional development not only involves how the child interacts with others but also how the child feels about "self". A supportive environment, in which you respond to and praise the child's efforts, with opportunities for independence will help the child build self-esteem and positive relationships.

Encourage independent play skills with toys:

- When children are unattended give them toys they can manipulate by themselves.
- Give children toys which allow expansion in play (building blocks with cars, an assortment of fit-together blocks or beads, for imaginative play supply dolls, tea sets, play kitchen sets).
- Give the child a variety of toys to choose from.
- Praise the child periodically for good playing.

Use interaction with adults:

- Respond to child's gestures or verbal needs.
- Praise the child for initiating appropriate interactions with you.
- When appropriate, allow the child to have control over the flow of the conversation or activity.

Interaction with peers:

- Set up activities so children play near each other (at a water table; in a rocking boat, in an art activity; in a designated play area).
- Set up and model activities to encourage children to interact (imaginative play with dolls; play kitchen sets; tea parties; musical movement games).
- Supervise and encourage cooperative play skills (holding hands during games and when walking places; passing out objects to each other during snacks or tea parties, at ball games).
- Increase the amount of time child is expected to remain in a group activity during story time or music activities.

Module	Hour	Handout
12	3	7

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SUGGESTED ENVIRONMENTAL CONSIDERATIONS AND ADAPTATIONS IN THE PROGRAM CAREGIVING SETTING

When possible, provide the child with or alert child to different floor surfaces that indicate different rooms or activity areas:

- **rug - for play area, bedroom**
- **linoleum - in kitchen and art area**
- **tile - bathrooms**
- **grass - outside, yard.**

Place cue cards with the same texture (such as felt circles, sandpaper squares) on things that belong to the child (chair, cubby, toy or work box).

Encourage the child to feel different wall surfaces:

- **wall paper**
- **paint**
- **wood slats.**

Avoid use of bright overhead lights, direct sunlight through the window, or direct lamps:

- **indicate specific areas with color-coded labels**
- **alert the child to different colors of wall and doors**
- **encourage the child to use light contrasts to find open doorways, turns or open spaces in hallways, windows, exit doors.**

Module	Hour	Handout
12	3	8

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Appendix C

Reproducible Forms for the Six-Week Follow-Up Activity

The Six Week Follow-Up Activity

MITCH Module 12

These completed forms should be sent to:

Name _____

Address _____

_____

_____

These forms are due at the above address by _____
date

Directions:

The participant should complete the questions on the following pages. It may be helpful to consult with the director of the caregiving setting or with a teacher or therapist who may be familiar with the child identified by the caregiver.

Name _____

Date _____

MITCH Module 12

1. *List three signs which could indicate a possible visual disorder (i.e., rubbing eyes):*

   a) _____

   b) _____

   c) _____

2.

   a) *What is the visual impairment of one particular child in your caregiving setting?*

   _____

   b) *Does that child: (Check one for each)*

   - see light?

     ___ yes ____ no ____ don't know

   - see brightly colored objects?

     ___ yes ____ no ____ don't know

   - see small objects?

     ___ yes ____ no ____ don't know

   c) *Does that child show signs of light sensitivity?*

     ___ yes ____ no ____ don't know

   d) *If you checked "don't know" for any of the questions above, how could you find out more? (check all that apply)*

     _____observe child more carefully throughout daily activities

     _____ask parent or other professionals working with child

     _____do simple vision activities

3. *List three different sensory activities you have provided for the children in your caregiving setting:*

   a) _____

   b) _____

   c) _____

4. *List one mannerism a child may exhibit which you would want to discourage:*

   _____

5. *Name an everyday living activity and briefly describe how you could encourage helping the child become aware of body parts while doing the activity:*

   _____

   _____

   _____

6. *What is a good toy you could use to help teach a child to reach towards sounds?*

   _____

7. *What is a good activity to help teach the concept "in"?*

   _____

   _____

8. *What is one thing you can do to help a child who is tactually defensive?*

   _____

   _____

9. *List one way you could make story time more meaningful to a child who is blind.*

   _____

For ease of use, instructor is encouraged to remove the staple on this booklet and place the module into a three-ring binder.

Trim the binder identifier to an appropriate size, and affix to the spine of the binder.

BINDER IDENTIFIER

Visual Impairments: What You Need to Know

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Department of Education
Tallahassee, Florida
Betty Castor, Commissioner
Affirmative action/equal opportunity employer

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